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**A GROUNDED THEORY STUDY OF THE PREPAREDNESS OF
PARAMEDICS TO UNDERTAKE THE ROLE OF PRECEPTOR IN THE
CLINICAL SETTING**

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Declaration of Originality

This thesis contains no material which has been accepted for a degree or diploma by the University or any other institution, except by way of background information and duly acknowledged in the thesis, and to the best of my knowledge and belief no material previously published or written by another person except where due acknowledgement is made in the text of the thesis, nor does the thesis contain any material that infringes copyright.

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August 2018

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Statement of Ethical Conduct

The research associated with this thesis abides by the international and Australian codes on human and animal experimentation, the guidelines by the Australian Government's Office of the Gene Technology Regulator and the rulings of the Safety, Ethics and Institutional Biosafety Committees of the University.

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Abstract

This thesis explores the capability of paramedics to perform the role of preceptor in the Australian statutory ambulance service environment. The educational role and work context of paramedics working with learners, is investigated to establish theory about the nature of their role and how they are best prepared for that role.

During the late 1990's and early 2000's the paramedic profession began a change process from a traditional on the job (vocational) educational model to a pre-employment tertiary model of education. This change process is ongoing today with all but one statutory ambulance service fully adopting the tertiary model. The remaining ambulance service operates both the vocational and tertiary educational models concurrently.

This change in educational model brought with it change in the expectations placed on paramedics working with learners. There was an additional change in the workload, as universities began to offer paramedic programs and seek clinical placement opportunities for their students. This, along with the ambulance service based educational programs for transitioning graduates to independence (internships) as well as internally operated promotional courses, resulted in paramedics being required to work with learners more frequently than before. These changes occurred in an organisational, educational and professional environment that lacked clear definition for the role paramedics performed when working with learners. While some research has examined the experiences of learners in the new paramedic educational context this study focusses on the paramedics themselves.

This study used a grounded theory approach to investigate the experiences of paramedics in performing the preceptor role in two Australian states, Tasmania and

New South Wales. A series of intensive interviews were conducted between August 2013 and March 2015 to investigate paramedics' experiences of working with learners.

A major finding was that the role paramedics performed in working with learners lacked definition and clarity, resulting in inconsistent application of preceptorship at all levels of paramedic education. This study found that paramedics were both untrained and unprepared for the preceptor role which was perceived as being thrust upon them without choice and, in most cases, consultation.

This research established the theoretical construct of the paramedic preceptor, which is expected to vastly improve the experiences of paramedics with flow on effects to the paramedic education system as a whole. Furthermore, this research has identified five key recommendations for the paramedic profession. First that the language used by the profession be standardised through the use of the term preceptor; second that the role of the paramedic preceptor be clearly defined to encompass the unique needs of the profession; third that a set of criteria be developed to aid in the selection of preceptors and that a selection process be applied to occupants of that role; fourth, that an initial training program be developed in partnership between the profession and the universities for paramedic preceptors, along with continuing professional development opportunities; and finally, fifth, that employers and universities establish clear communication and support mechanisms to aid paramedics in performing the role of preceptor.

Glossary

Ambulance Service	For the purposes of this study ambulance service refers to those services operated in each state as statutory bodies, or contracted to do so, in the provision of emergency medical response and urgent care. This does not include non-emergency patient transport providers, private ambulance services or event medical companies.
Clinical Support Officer (CSO)	Refers to a senior paramedic fulfilling a clinical supervisory role, similar roles include training officer and station officer.
Degree Conversion	Paramedics that were qualified under the vocational model to Diploma or Advanced Diploma level under the National Health Training Package are able to undertake specialised conversion programs through a number of universities that provide the paramedic with a Bachelor Degree in Paramedicine.
Intensive Care Paramedic (ICP)	“An Intensive Care Paramedic is an advanced clinical practitioner in Paramedicine who provides medical assessment, treatment and care in the out-of-hospital environment for acutely unwell patients with significant illness or injury.” (Paramedics Australasia, n.d-b)
Learner	For the purposes of this study the term learner was initially used to refer to any person paramedics were required to work with and support their learning experience in the clinical setting. The term learner was used due to the highly variable use of terms and types of learners, including but not limited to university student on placement, graduate paramedic during their internship, paramedics undertaking extension course such as intensive care, or paramedics returning from a period of non-practice.
Paramedic	“A Paramedic is a health professional who provides rapid response, emergency medical assessment, treatment and care in the out of hospital environment.” (Paramedics Australasia, n.d-a)
Paramedicine	The professional field of practice of paramedics, the provision of emergency medical assessment, treatment and care in the out of hospital environment
Statutory Ambulance Service	For the purposes of this thesis a statutory ambulance service is a state ambulance service (such as Ambulance Tasmania or the Ambulance Service of New South Wales), or privately operated ambulance service operated on behalf of the state (such as St John Ambulance in Western Australia or the Northern Territory)

Acronyms

AHPRA	Australian Health Practitioner Regulation Agency
ANZCP	Australian and New Zealand College of Paramedicine
NSWA	Ambulance Service of New South Wales
AT	Ambulance Tasmania
AV	Ambulance Victoria
CAA	The Council of Ambulance Authorities
CSO	Clinical Support Officer
ECP	Extended Care Paramedic
HWA	Health Workforce Australia
ICP	Intensive Care Paramedic
MICA	Mobile Intensive Care Paramedic (Victoria)
PA	Paramedics Australasia
QAS	Queensland Ambulance Service
SAAS	South Australian Ambulance Service
StJ-NT	St John Ambulance Northern Territory
StJ-WA	St John Ambulance Western Australia

Chapter One – Introduction.

1.1 Introduction

Within the health system there are a range of professions which fulfil roles and functions specific to their professional domains; one such evolving health profession is paramedicine. Paramedicine is an emerging field evolving from the technical work functions of first aid and ambulance transport, through to what we now know of as paramedicine. The field of Paramedicine has undergone significant change over the past several decades (Edwards, 2011; Joyce, Wainer, Archer, Wyatt, & Pitermann, 2009). Initially, the role of paramedics, formally referred to as ambulance officers or other forms of a technical role title, was to respond to incidents and transport patients to a health care facility. Over time the role developed into a combination of a treatment provider as well as a transport provider. In recent decades the role has evolved further to encompass broader functions, often at more advanced clinical levels. These changes in function have brought with them changes in the makeup of the workforce as well as changes in the education and development of the workforce in paramedicine, reflected in a transition away from vocational education or on-the-job training in favour of preparatory university degrees.

Paramedics have been required to work with learners in both the older vocational education models as well as in the newer tertiary model. The demand on paramedics in undertaking the role of working with learners has grown and changed considerably under the tertiary model. In the presence of increasing demand to work with learners, there is also a lack of clarity in what is expected of paramedics when working with learners, with key stakeholders having a range of expectations; including expectations

from the learners, the employers, education providers and the paramedics themselves. Despite this, little is known about the paramedics' preparedness to undertake the multifaceted roles now required of them. While the profession and the industry have an expectation that paramedics will work with learners, paramedics undertake a degree in paramedicine, often with limited or no education provided to them on working with learners as identified in Chapters 7 and 9. The increased demand for this role, lack of clarity on expectations, and lack of education and training in the role create a risk of potential poor performance and lost opportunity for the profession. This research explored the perspectives of paramedics in relation to their preparedness to work with learners, with a view to constructing a theory of paramedic preceptorship and associated recommendations for future improvements for the profession.

This chapter introduces paramedicine as a profession, and explores the role and function of paramedics in the modern health care system; describing the changing demand on paramedics, and what changes the profession has undergone in relation to their role, function and education in recent decades. It demonstrates a need to better understand the educational context of paramedicine with regard to on-the-job clinical education, particularly from the perspective of the qualified paramedics who support students and other learners in the clinical setting. This chapter then provides a justification for the investigation, specifically the exploration of the preparedness of paramedics to work with learners through constructivist grounded theory. The chapter concludes with an outline of my own place in the profession and in the interests of open reflexivity, describing how my past has influenced the research process.

1.2 The origins of paramedicine

While little is documented in the academic literature on the history of paramedicine, paramedicine is a relatively recent addition to the health professions. Ambulance

services began to form in various regions in Australia from the 1880's onwards; Tasmania in 1887 (Alexander, 2006); Queensland in 1892 (Queensland Ambulance Service, 2013); New South Wales in 1895 (Ambulance Service of New South Wales, n.d.). The first ambulance services were often operated by local municipalities or hospitals and were staffed by ambulance officers (ambulance drivers or stretcher bearers in earlier years). Paramedicine evolved from the emergency response role of ambulance services, having its origins in the provision of first aid, to the community and transport to a health care facility. The term paramedic is a relatively new one in Australia, with the term emerging the 1970's for what at that time constituted the more advanced clinical level of ambulance officer (e.g. MICA Paramedic in Victoria, Level 5 Paramedic in New South Wales). The term was generalised to the workforce in the late 1990's and early 2000's and advanced clinical levels were renamed intensive care or critical care paramedics. The paramedic profession of today in Australia has evolved to a field of endeavour providing significant contribution to health care to the community beyond simple first aid. The Australian Government's Legal and Constitutional Affairs References Committee (2016) paved the way for paramedicine to be the 15th registered health profession at a meeting in May 2016, with registration due to commence on September 3rd 2018 (Paramedicine Board of Australia, 2018c).

1.3 The changing face of paramedicine

1.3.1 Role and demand

The Australian health care system faces a continuing increase in demand for health care services (Australian Institute of Health and Welfare, 2016), including a corresponding growth in the demand on ambulance services (Cantwell, Dietze, Morgans, & Smith, 2012; Eastwood et al., 2016; Toloo et al., 2013). Despite drivers for this increasing demand being described as poorly understood (Dinh et al., 2016), authors have

generally agreed that increasing demand is beyond that explainable by population growth and are multifactorial in nature. Changes in demand have been attributed to factors such as the ageing population, increased social isolation (referring to the lack of life partners to aid in decision making, and lack of alternative transport options), reduced access to primary care services, and insurance status in the face of rising health costs (Clark, Purdie, Fitzgerald, Bischoff, & O'Rourke, 1999; Dinh et al., 2016; Lowthian et al., 2011). Lowthian and colleagues (2011) further suggest that increased health awareness in the community and an increased expectation of health care were additional drivers for changes to demand.

The Productivity Commission (2017) found that during the 2015-2016 period there were 3,438,416 incidents requiring an ambulance response (145.1 incidents per 1,000 population), which resulted in 4,263,044 responses (178.1 responses per 1,000 population) whereas by way of comparison, in the 2006-2007 period, there were 2,712,815 incidents (132.9 incidents per 1,000 population) resulting in 3,188,249 responses (154.6 responses per 1,000 population). This represents a 25% increase in workload over the 10 year period. Whilst these data reflect ambulance responses, a review of patients transported to emergency departments by ambulance in New South Wales between 2010 and 2014 found that there was only a 3% rate of growth (Dinh et al., 2016), which suggests not only a growth in workload, but a change in the nature of work whereby not all patients required transportation to hospital.

With the increasing demands on ambulance services and the greater health system, there has been an associated change in the scope of work of a paramedic. Paramedic roles have changed from their initial basic treatment and transport functions to the provision of health care assessment, treatment, and, where required, transport or

referral to other health services (Lowthian et al., 2011). The Report on Government Services (ROGS) for 2017 stated that:

Ambulance services aim to promote health and reduce the adverse effects of emergency events on the community. Governments' involvement in ambulance services is aimed at providing emergency medical care, pre-hospital and out-of-hospital care, and transport services (Productivity Commission, 2017 p. 11.5).

This role description is a far cry from the definitions used when the profession originated, where paramedics were described as little more than “*a transporter of persons to hospital*” (O'Brien, Moore, Dawson, & Hartley, 2014). Further, the 2017 ROGS described ambulance services, and therefore by default paramedics, as integral to the states' health systems (Productivity Commission, 2017).

The function of a paramedic now encompasses an advanced scope in critical care, beyond that of basic treatment and transport. The scope of practice of paramedics has grown in complexity with the incorporation of more advanced skills and invasive medical procedures and with the availability of more advanced technology (O'Brien, Moore, Hartley, & Dawson, 2013). Often driven by the increased demand on the health system, evidenced by excessive demand in both the community and hospital settings, paramedics have seen significant change in the nature of their work, workload and educational scope, as aspects of general practice and emergency medicine have migrated into the profession. These changes faced by the profession have been further affected by an increased requirement for clinical decision making and diagnostic capacity (O'Brien et al., 2013).

With the expansion of paramedic scope of practice to include the management of a wider range of health complaints, some aspects of hospital based emergency medicine have also moved into the field of paramedicine. These changes have resulted in an

increasing complexity in the role of the paramedic and the emergence of extension qualifications in critical care paramedicine and, more recently, extended care paramedicine, community paramedicine and practitioner roles in paramedicine (Thompson et al., 2014).

Paramedics Australasia (PA), a professional body representing paramedicine in Australasia, undertook a national consultation project in 2012 to identify the variation in paramedic roles and titles (Paramedics Australasia, n.d.). Their findings are reflected in table 1.1, below, which reflects that, PA found in their consultation that paramedics have diverse work roles and contexts across more than just ambulance services where they originated; in-fact PA stated that paramedics work in statutory ambulance services, private ambulance services, academic or teaching institutions and the defence forces (Paramedics Australasia, n.d.). It must be noted that this description of paramedic work locations is limited as it does not include additional non-traditional or emerging work locations such as event medical companies, mining and industrial sites, and the Australian Customs Service.

Table 1.1. Representation of the diversity in paramedic roles and titles, adapted from *Paramedics Australasia. (n.d.). Paramedicine Role Descriptions*

Role	Alternative Titles
Paramedic	Ambulance Paramedic, Paramedic 3, Advanced Care Paramedic, Intermediate Life Support (ILS) Paramedic, Australian Defence Force (ADF) - Medic (or Advanced Medical Technician), Combat Paramedic (Australian Army), New Zealand Defence Force (NZDF) – Medic (Intermediate Life Support Level), Underwater Medic (Royal Australian Navy and Australian Army)
Intensive Care Paramedic (ICP)	Mobile Intensive Care Ambulance (MICA) Paramedic, Clinical Manager (Royal Australian Navy), Intensive Care Paramedic (ALS), Level 5 Paramedic, Rescue Paramedic, Special Casualty Access Team Paramedic, Underwater Medic (Royal Australian Navy and Australian Army)
Retrieval Paramedic (RP)	Flight Paramedic, Air Ambulance Paramedic, MICA Flight Paramedic, Critical Care Paramedic, Flight ICP, Aero Medical Evacuation Medic (ADF)
General Care Paramedic (GCP)	Extended Care Paramedic, Community Paramedic

In an attempt to keep pace with the changes in healthcare, diversity in workforce and demand, incorporating the evolution of the role of paramedics, ambulance services within Australia have undergone an increase in staff numbers. The 2017 ROGS, using

data obtained from each state ambulance service, reflects that during the 10 year period until 2016 there was significant growth, constituting a 28% rise in the paramedic workforce across Australia. This report indicates that during the 2015-2016 period there were 11,246 paramedic staff ¹, an increase from 8,140 paramedic staff during the 2006-2007 period (Productivity Commission, 2017). This growth in the workforce has resulted corresponded with a growth in university programs offering entry level paramedicine degrees, and the resulting increase in clinical placement demands discussed in Section 1.3.2.

1.3.2 Education

The above mentioned changes in work volume and nature, and associated increase in staff numbers nationally, have occurred at the same time as an evolution in the way in which paramedics are educated in response to the needs of the profession and the healthcare system more generally. Paramedicine has moved through a continuum of development from a low skilled health transport provider through to a highly skilled and highly technical health care professional. The educational trajectory of the paramedic profession has developed from internally operated certification, through to externally credentialed diploma and advanced diploma programs (O'Brien et al., 2014), to where it is today with a bachelor degree in paramedicine being the minimum career entry requirement in most Australian states (Edwards, 2011). This change has occurred over a relatively short period of time with a transition to university programs occurring from

¹ Paramedic staff for this purposes has been taken from the reported staffing under the headings “Students and base level Ambulance Officers” and “Qualified Ambulance Officers” in the ROGS 2017. Remaining “Ambulance Operative” positions appear to be non-paramedic in nature such as patient transport officers, communication officers and other ambulance roles where paramedic qualifications are not essential.

1994 to 2016 (Brooks, Grantham, Spencer, & Archer, 2018), resulting in the majority of Australian paramedics undertaking a bachelor degree prior to securing employment as a paramedic over the last decade and a half. For example, Joyce and colleagues discussed the change in workforce education in Victoria, highlighting that in 2001 approximately one in ten paramedics recruited into that state's ambulance services were tertiary qualified, whereas by 2006-2007 100% of recruits were taken from university paramedic programs (Joyce et al., 2009).

These changes in paramedic education have occurred through a disjointed state-by-state implementation of educational expectations, which has resulted in the coexistence of both the vocational education model and the tertiary education model (Edwards, 2011). The tertiary education model exists in all states and territories in Australia with the coexistence of both models in New South Wales. In the vocational model of education, paramedic students or trainees are employed by their ambulance service for a three year period during which they alternate from classroom training to on the job practical experience, culminating with qualification as a paramedic. Whereas in the tertiary model self-funded students undertake degree study in paramedicine at a university, on completion of which they are able to apply for employment with an ambulance service, initially as an intern or graduate paramedic. Upon successful completion of an intern or graduate program, the tertiary educated paramedic is authorised to practice independently. Figure 1.1 represents the educational pathway for entry into the paramedic profession in each educational model.

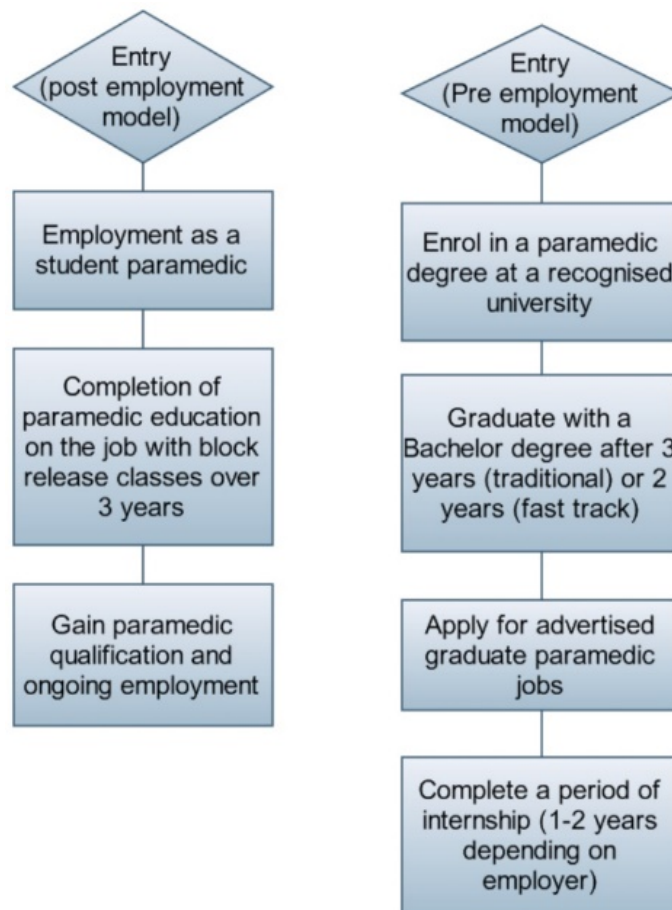


Figure 1.1: Educational pathway of paramedics undertaking the post-employment (vocational) or pre-employment (tertiary) educational models in Australia. Taken from Edwards, D. (2011).

The introduction of the university-based model of paramedic education has resulted in a number of significant changes in the paramedic education setting. These have included a rapid growth in the number of education providers, a growing demand for clinical placements with ambulance services to compensate for lack of access to the clinical setting, as well as changing roles and expectations of learners during the clinical placement. Since the commencement of the first university entry level paramedic degree in 1998 (Brooks et al., 2018), there has been a rapid rise in the number of universities offering such programs; at the time of writing, sixteen universities in Australia offer paramedicine programs (The Council of Ambulance Authorities, 2017). In

addition to the increase in university programs nationally, there has also been a rise in the number of students enrolling in these degrees, the number of students enrolled in accredited paramedic degrees rose by 14% from 2013 to 2015 (Productivity Commission, 2017).

Student numbers in paramedic courses continue to rise, resulting in the need for a greater number of clinical placements and, therefore, a greater number of qualified paramedics to support learners whilst they are on placement. Further to this, upon completion of their entry level paramedic degrees, university graduates are required to undertake an internship if they seek employment with a state ambulance service (The Council of Ambulance Authorities, 2014). These internships typically last for one to two years and involve the intern working with a qualified paramedic to develop their clinical skills as they transition from student to independent practitioner. Graduates who do not seek employment with a state ambulance service, preferring the private or military sector, are not required to undertake an internship. In addition to the need to support paramedic students and interns newly graduated from the tertiary programs, professional experience placements are sought from a range of other sources including; vocational paramedic programs that continue to operate to supply the private paramedic sector; the Australian Defence Forces; as well as other university health profession programs such as Medicine and Nursing. This rise in demand for paramedics who are suitably qualified and able to work with the learners, represents a threat to the capacity of the workforce and the profession (Joyce et al., 2009) given the limited supply, and potential for fatigue and burnout.

At the outset of the transition to tertiary education, students were placed with experienced paramedics to support their learning. As the number of students has risen, however, this model is increasingly hard to maintain. The task of working with

undergraduate students on placement, and potentially interns and other learners, is often left to junior or less experienced paramedics (Edwards, 2011; O'Meara, Williams, Dicker, & Hickson, 2014; Wray & McCall, 2009). The experience of tertiary students while on placement has been investigated to some extent, with the literature indicating that their learning experiences have been less than ideal (cf. Boyle, Williams, Cooper, Adams, & Alford, 2008; Wray & McCall, 2009). One such study suggested that the paramedics working with these tertiary students knew very little about the students, which negatively impacted then on their learning experience (Wray & McCall, 2009). However what is still under-examined, and therefore poorly understood, is the impact of leaving this important task of working with learners to an inadequately prepared, qualified or experienced workforce.

In the face of changes in paramedic education and the importance of the clinical learning environment, it would be reasonable to expect that there should be clear structure provided to students and the paramedics they work with, in order to guide the placement requirements, activities and outcomes. This is not the case, rather the lack of a clear placement structure and guidance to the paramedic has been highlighted by several authors (cf. Boyle et al., 2008; Hou, Rego, & Service, 2013) which has been linked to negative learning experiences for university students undertaking clinical placements.

In addition to the lack of a clear and consistent structure in clinical placements, there is also a wide range in the terminology used to describe the role of paramedics working with learners in a clinical on-the-job setting (Health Workforce Australia, 2010; O'Meara, Williams, & Hickson, 2015). The language used to describe a role can have a significant impact on understanding function, it is therefore important to consider terminology in the context of the culture (in this case institutional and professional

culture) in which it is used (Allen, Chapman, O'Connor, & Francis, 2007). In the absence of a structure to inform paramedics on their role in working with learners, the lack of clear terminology compounds the potential for a lack of clarity on their role and resulting negative learning experience for learners.

The afore mentioned changes in the role of ambulance services and service demand, along with the coinciding changes in demand from universities for professional experience placements, has resulted in a marked change in the paramedic working environment. Whilst paramedics worked with learners under the old vocational model, the number of learners was limited by the parameters of the ambulance service's staff establishment. The change from a vocational model to a tertiary model also brought with it a natural growth in the depth of theoretical knowledge that paramedic students experiencing the latter model bring to the placement (Wray & McCall, 2009). While these students have enhanced medical understanding, they lack experience and understanding of its significance in the clinical setting. It is not unreasonable to expect that these changes, specifically the enhanced learner knowledge married with a deficit in their skills in applying this knowledge, would have resulted in a change in the expectations and practice of paramedics working with learners.

A number of studies have been conducted into the experience of tertiary students in the clinical placement setting, however there is a dearth of literature from the perspective of the paramedic outlining how these changes have affected the paramedics working with the learners. One study into the experience of tertiary students suggested that the paramedics working with these students did not know much about the students, which negatively impacted then on the learning experience of the student (Wray & McCall, 2009). This particular study caused me to question whether paramedics, faced with substantial organisational and professional change,

may not know much about themselves and what their role is when working with learners.

1.4 The research question

The alternative perspective outlined above caused me to wonder whether paramedics are well-prepared for the role of working with learners. As discussed, the paramedic learner could be a tertiary or vocational student on placement as well as, from my own experience, additional learners including those undertaking further training in intensive care, or students from other health professions on clinical placement such as nursing and paramedicine. Each of these learners could present with a diversity of learning needs as well as expectations of the paramedics they work with. Therefore to encompass all potential learners paramedics may work with, the research question that was explored in this study was:

How do Paramedics view their readiness and preparedness to perform the preceptor role?

1.5 Constructivist grounded theory

In order to respond to the research question, this study was undertaken using a constructivist grounded theory approach, whereby the experience of paramedics working with students was explored through intensive interviews, as described in Section 4.3.2. This approach presents as an ideal methodology in the face of the dearth of literature in the field of paramedic education focussed on the paramedic working with learners on the job. It is an appropriate methodology as it builds knowledge and theory from the data gathered during research rather than seeking to validate existing theory; grounded theory generates theory as opposed to the description of phenomena

or themes; and it provides the researcher with a systematic set of guidelines for the conduct of research (Charmaz, 2014).

Constructivist grounded theory is an evolution from the origins of grounded theory that provides recognition and acknowledgement of the influence the researcher has on the research process (Charmaz, 2014) making it well suited to a study such as this where I, as the researcher, have a substantial background in the field.

1.6 Situating myself

At the outset of this research my career had already traversed a broad range of roles and experiences in paramedicine. I had already worked in the field of paramedicine in one form or another for 26 years. My career had taken me from Tasmania to Queensland, Victoria, internationally to Vanuatu and back to Tasmania, with each of these moves being punctuated by periods of time back in Tasmania. My work roles ranged from Paramedic or Intensive Care Paramedic, through to clinical educator, operations manager and university academic in paramedicine. Throughout all of these experiences I have been exposed to students and trainees and the paramedics working with them, either as a preceptor myself, a manager supervising them or as an educator overseeing and supporting them. Professionally, I had held a wide range of roles outside my employment on state and national boards for our professional body, Paramedics Australasia (formerly the Institute of Ambulance Officers and subsequently the Australian College of Ambulance Professionals), as well as on professional lobby groups and committees. I was elevated to Fellow of Paramedics Australasia in 2007.

My exposure to the field being investigated in my research, therefore, has been extensive. Throughout this time it was apparent to me that while there was a high value placed on the clinical learning environment, little to no attention was given to the

paramedic workforce working with learners in this environment. During my early years as a University of Tasmania lecturer I was responsible for the development and delivery of a unit of study aimed at preparing students in the now discontinued Associate Degree in Paramedic Studies for the inevitable role of working with students or other forms of trainee when they graduate. While developing this unit I was able to provide materials on learning, learning theory, leadership and some limited material on student learning experience in paramedicine, due to the dearth of evidence in the literature I was unable to provide any information specific to paramedics working with learners. To this end I found I had to rely heavily on material from other health professions. This lack of evidence in my profession surrounding clinical learning fuelled my desire to know more about the paramedic learning environment. My focus on the perspective of qualified paramedics working with students was further honed, following my review of an article in which student subjects of a study of clinical learning suggested their preceptors did not know much about them (Wray & McCall, 2009). It made me question how much preceptors actually know about how they should act in the role or the expectations of the preceptor role itself.

1.6.1 Reflexivity

Charmaz (2014) defines Reflexivity as “The researchers scrutiny of the research experience, decisions, and interpretations in ways that bring him or her into the process. Reflexivity includes examining how the researcher’s interests, positions or assumptions influenced his or her inquiry” (p.344). Hibbert, Sillince, Diefenbach, and Cunliffe (2014) explain this by describing reflexivity as applying “methodological self-consciousness” (p. 283) to the research process. When applying these definitions to my interactions with this research, I recognise that my experiences throughout my career have had significant impact from the outset of the study. Through my own experiences I developed a critical view that student learning experiences reported in articles such as

the one by Wray and McCall (2009) are not simply a factor of the knowledge paramedics have of the student, with a high likelihood that paramedic self-awareness and self-efficacy in their role may also be a factor. Therefore my experiences have influenced the design of the research from initial question formation as I read, and doubted the findings of Wray and McCall (2009) in relation to the cause of negative student experiences.

At the outset of this research I recognised my preconception that there may be an issue with how paramedics understand their role in working with learners and the degree to which they are prepared for the role. The risk of preconceptions forcing the direction of data analysis and theory generation is recognised in grounded theory (Charmaz, 2014). While my prior experience guided the question development at the outset of this study, applying a reflexive approach allowed me to be open to the concepts within the data during coding and analysis. I was able to apply a number of approaches recommended by Charmaz (2014) including; coding for actions (gerunds) or processes rather than preconceived topics; focussing on participant concerns during coding rather than discipline concerns; and avoiding excessively generalised or summative rather than analytical coding. To achieve the reflexivity described above, I made use of memoing as an analytical device. Memoing is a strategy applied across the various approaches to grounded theory (Charmaz, 2006; Charmaz, 2014; Corbin & Strauss, 2008; Glaser & Strauss, 1967) and is recommended as a useful strategy for maintaining a reflexive approach in qualitative research (Birks, Chapman, & Francis, 2008; Charmaz, 2014; Hibbert et al., 2014; Kidney & Manning, 2017; Thornberg, 2012). Memoing and how it is applied in this research is further described in Section 3.3.5.1 and in Section 4.3.3.

1.7 Significance of this study

The findings of this study will aid in raising the standards of paramedic education at all levels within the profession through improved knowledge of the paramedic preceptor role and what is needed to prepare paramedics for the role. The greater demand for paramedic clinical education experiences justifies the need to better understand the paramedic preceptor role, and to establish a model through which we can ensure greater understanding of the role. This includes the language we use in respect to the role, how to prepare for the role, what education is required, and how to ensure the right paramedics are performing the preceptor role. Ambulance services and education providers will be able to make use of the findings of this study to build and enhance the dual capabilities in their paramedic preceptor workforce.

1.8 Structure of the thesis

The thesis consists of ten chapters, which are summarised below:

Chapter one (This chapter) provides an outline of the field of research, context for and justification for the research question, as well as introducing myself as the researcher.

Chapter two is a focussed literature review, following the grounded theory principles of reviewing sensitising literature to the topic rather than the more traditional exhaustive literature review. A broader review of relevant literature is then incorporated in the five findings (results and discussion) chapters.

Chapter three presents an outline of Grounded Theory; its origins and guiding principles, and the variations in grounded theory over time. In this chapter I introduce constructivist grounded theory and provide a rationale and justification for its use in my research.

Chapter four provides an outline of how constructivist grounded theory was used in the conduct of this research, providing an explanation of the sampling approach, use of interviews for data collection and the application of coding. In this chapter I outline the theoretical perspectives that I applied in the analysis of the data, and outline the analytical categories that emerged.

Chapters five through to nine are individual findings chapters which outline findings from the data and explore these findings in relation to the literature. I then articulate how each of the five broad findings categories informs a theory on the preparedness of paramedics to work with learners in the clinical practice setting. Specifically:

- Chapter five discusses the findings related to the knowledge and understanding paramedics have of their role when working with students and explores the meaning of language and action in association with the role.
- Chapter six outlines the processes by which paramedics are selected to work with learners.
- Chapter seven describes the findings associated with how paramedics are prepared for working with learners (e.g. by the profession, through professional learning or previous education) or seek to prepare themselves.
- Chapter eight discusses the experiences paramedics describe that impact on their performance when working with learners.
- Each of these initial four findings chapters contributes to the final findings chapter, Chapter 9, which reports on what, in the eyes of the paramedic, is needed to enhance practice when working with learners.

Chapter ten builds on the core categories identified in chapters five through to nine to articulate a theory of paramedic preceptorship.

Chapter Two – The literature

2.1 Introduction

This literature review chapter presents a focussed review of the literature relating to my research question, in accordance with the approach to the use of literature in constructivist grounded theory. The chapter begins with discussion of the role of the literature review in Grounded Theory, providing an explanation for the literature review approach I have taken during this study. The chapter then presents a review of the literature relevant to the field of inquiry, focussed on research in the field of paramedicine. The review explores the literature in relation to the clinical learning environment, its role and importance in paramedic education, experiences of learners undertaking learning experiences in the clinical environment, and literature regarding the experiences of the paramedics working with learners. This chapter will conclude with an analysis of the gaps in the literature relevant to this research study.

The conduct of the literature review involved a search of the databases, Embase®, Medline® and Scopus® using two grouped sets of key words. The same sets of search terms were then used in Google Scholar™ to identify relevant grey literature or articles not indexed in the databases searched. Paramedic, Ambulance and EMT were grouped and combined with education, educator, preceptor, mentor, instructor and supervisor. These search terms were applied to the databases stated for publications from 1980 onwards. Results were reviewed for inclusion by title initially and abstract where title alone did not adequately inform the article focus. To be included in this review the article needed to have been published in a peer reviewed journal, focussed on the paramedic profession and addressed the education of paramedics in the clinical on-the-

job-setting. Articles excluded were those not published in peer reviewer journals or which focussed on classroom based education rather than the field clinical education setting. In order to maintain sensitivity to the paramedicine literature, beyond the initial review, the field of study was monitored during this study for additions to the literature, which were included in the review. A final update of the search terms was then undertaken at the conclusion of the study to ensure a comprehensive review was achieved. The final search following removal of duplicates and articles or other documents not considered in scope resulted in 60 articles reviewed.

2.1.1 The role of the literature review

The role of the literature in a grounded theory study is complex, with differing views on when the review should be conducted and to what extent, which will be discussed in greater detail in Chapter 3, Section 3.3. The following is a review of literature in the substantive area of inquiry only, being the clinical education environment within paramedicine, and without reference to the wider views in other health professions literature. Charmaz (2014) acknowledges there is benefit to a review of the literature either at the outset of the study or later, where if left until later it should be conducted after the analysis and associated categories in the data have been constructed. Urquhart (2001) highlights that the grounded theory approach to the literature is not to avoid the literature, but more to prevent the inductive grounded theory methodology becoming a deductive process due to the influence of pre-conceived ideas garnered in the review.

The concept of a preliminary review of the literature is supported by Giles, King, and de Lacey (2013) who highlight its role in increasing the theoretical sensitivity (discussed in Chapter 3, Section 3.3.2) of the researcher, however at the same time they recognise the advocacy of Charmaz in then conducting a further review during data analysis.

Therefore my approach in this study was to be familiar with the literature relating to the research question in paramedicine, but given the volume of literature in other professions on this topic, I refrained from reviewing that material until after my own data collection and analysis. Literature from other fields was then reviewed for supporting evidence for emerging categories within the data, allowing for a more focussed approach to the evidence. This allowed me to avoid imposing knowledge gained from other health professions that have undergone the same transition from vocational to tertiary settings, yet still incorporate the lessons learned into the discussion and synthesis of the findings within my data.

2.2 The clinical learning environment in paramedicine.

The evolution of paramedic education, described in Section 1.3.2 has been rapid, changing from a vocational model to that of a tertiary model of education. Educational reform such as this has been described as potentially having a negative impact on both the learner and educator (Wray & McCall, 2009). However regardless of the educational model used, the importance of the clinical education experience has been discussed by a number of authors, citing clinical placements or on the job clinical education to be essential to paramedic learning (Brown et al., 2011; Health Workforce Australia, 2010; Michau, Roberts, Williams, & Boyle, 2009; Williams, Brown, Scholes, French, & Archer, 2010; Willis, Pointon, O'Meara, McCarthy, & Jensen, 2009; Wray & McCall, 2009). Clinical placements, whether as a vocational student or a tertiary student, provide the learners with exposure to opportunities for skills and knowledge consolidation (Devenish, Clark, Fleming, & Tippet, 2015; O'Brien et al., 2013) as well as professional socialisation and assimilation to the workplace (Devenish et al., 2015). Despite this evidence, there remains a high degree of inconsistency in the clinical

learning opportunity across tertiary programs, with wide variations in the number of clinical placement hours available to students (Hou et al., 2013; Joyce et al., 2009).

Joyce et al. (2009) found that the range in clinical placement hours for university paramedicine programs extended from 120 hours through to 1,200 hours, admittedly these hours may have changed since their study in 2009, however there is no further evidence in the literature that analyses the range of hours. The Council of Ambulance Authorities acknowledged the lack of mandated clinical placement hours for paramedicine degrees and attempted to establish a standard through the release of guidelines for clinical placements (The Council of Ambulance Authorities, 2018). These guidelines recommended a minimum of 600 hours of clinical placement, made up of a minimum of 300 hours in an Australian or New Zealand emergency ambulance service, plus an additional 300 hours of clinical placement in other health care settings such as hospitals and aged care settings or international ambulance services (The Council of Ambulance Authorities, 2018). In contrast, those learners still undertaking the vocational model have additional opportunity for clinical exposure due to their employment as a student paramedic, as opposed to being limited to only those times when they are on a learning focussed placement in entry level education programs (Edwards, 2011).

Whilst the clinical placement or exposure to the clinical environment itself is considered essential, there is more to the value of clinical education than time alone. Indeed, the rate of patient contact, what the student experiences and what they are able to do during this placement have all been reported as important elements in student success (Bury, Janes, Bourke, & O'Donnell, 2007; Margolis, Romero, Fernandez, & Studnek, 2009; Salzman, Dillingham, Kobersteen, Kaye, & Page, 2008). In a study of the theory to practice gap in undergraduate paramedic education Michau et al. (2009) noted that

30% of their participants were not exposed to the opportunity to manage clinical cases and discuss the need for students to be able to actively participate in clinical care rather than simply be exposed to that care. This is supported by another study from the United States into strategies employed by high performing paramedic programs, in which patient contact that included leading the care of a patient under supervision was identified as an important element in clinical learning (Margolis et al., 2009). Margolis and colleagues, in their focus group study of factors affecting paramedic program success, specifically note that length of placement is a poor predictor of placement adequacy (Margolis et al., 2009). The philosophy of direct case involvement is supported in the 2018 clinical placement guidelines issued by the CAA, which specifies that “There is an expectation that clinical placements will afford a student the opportunity to participate in supervised clinical care, not simply in an observational capacity” (The Council of Ambulance Authorities, 2018, p. 2). Importantly however these guidelines still hold to an hours minimum as mentioned above, despite suggestions of this being an inadequate measure. It would seem, therefore, that there is more to be learned on what constitutes a suitable clinical learning experience, the influence of placement location, hours and patient exposure all being proposed but not sufficiently validated with substantial studies.

2.3 The experiences of the learner

The integration of theory with practice has been identified as an essential element in successful student development (Boyle et al., 2008; Michau et al., 2009; Wongtongkam & Brewster, 2017). There have been a number of studies that have explored the experiences of paramedic undergraduate students during their clinical placements (Boyle et al., 2008; Michau et al., 2009; Waxman & Williams, 2006; Wongtongkam & Brewster, 2017; Wray & McCall, 2009), and in many of these there have been a range of

negative learning experiences reported. Students report not being welcome in the placement location (Boyle et al., 2008; Wray & McCall, 2009), their role in the placement not being understood by paramedics (Michau et al., 2009; Wray & McCall, 2009), and experiencing a range of lost learning opportunities in either clinical care or through the misuse of down time (Boyle et al., 2008; Michau et al., 2009; Wray & McCall, 2009). There are, however, positive learner experiences also reported. For example, one Victorian study reported more positive experience in the early year groups, where the requirements of students are lower, while more negative experiences occurred in higher level students seeking greater involvement (Boyle et al., 2008).

In an early study of student experiences in clinical placement Wray and McCall (2009) identified a range of lost educational opportunities and negative learning experiences which they attributed to preceptor factors. These factors included a lack of familiarity with the needs of learners, a lack of teaching experience and a lack of preceptor preparation in the face of the transition from the vocational models of education to a tertiary model. Their study, conducted in Victoria, suggests an overt resistance from preceptors toward students on placement, also suggesting that preceptors may feel threatened by the knowledge level of their tertiary students. Each of these points presented in this study are based on the information gained from a study of student perspectives, with no investigation of the perspective of preceptors. More recently, a study in NSW by Wongtongkam and Brewster (2017) investigated university student experiences as well as preceptor perspectives on the student placement. They found that students felt welcome in the clinical placement environment. This more recent study also found that students were able to gain opportunities to apply their skills and knowledge during the placement, only reporting lower opportunity when faced with low clinical case volumes. The difference between these two studies may be accounted

for by the time frame between them, as the tertiary model of education has become more embedded and a greater number of tertiary pathway paramedics are now in the workforce.

Expectation management is evident as an area poorly addressed in paramedic education, with research indicating that university students are poorly prepared for and aware of what to expect when entering into a clinical placement, particularly in the face of the diversity in university programs (Hickson, Williams, & O'Meara, 2015; Williams, O'Meara, & Hickson, 2015). The relationship between preferred and actual placement experiences in health sciences students (including paramedics) was explored by Brown et al. (2011), who found that there is a need for greater communication between stakeholders in the clinical education experience to clarify expectations and improve the learning experience.

2.3.1 Who are the learners?

Paramedics supporting learning in the clinical setting are faced with a wide range of diversity in the type of student and education program they are required to support. For example, depending on what their clinical level is and where they are rostered, paramedics might be required to support students on clinical placement from universities, graduate paramedics undertaking their internship, paramedics undertaking additional clinical education at more advanced levels (e.g. intensive care or extended care), or working with learners in return to work or remediation contexts. Only two studies give passing reference to paramedics working with both undergraduate students and graduate interns (Boyle et al., 2008; Joyce et al., 2009), however Joyce and colleagues do acknowledge that there is a variation in the nature of the learning experience required between these two groups (Joyce et al., 2009). This is supported by another study investigating the educational differences between Australia and the

United Kingdom, which suggests that graduates are exposed to a different work environment than might have been pre-conceived whilst a student (Devenish et al., 2015). It is reasonable therefore to postulate that there would be further variation in the nature of learning experience for each of the other types of education programs identified. This is further complicated by the expanding demands on paramedic education to properly prepare paramedics for the changing work role they fulfil. One such change is working with the elderly, in the face of the ageing population and the reported findings that age is a high factor in the increasing demand for ambulance services. Lucas and colleagues describe compulsory clinical placements in aged care facilities and remarks on the challenges associated with finding suitable paramedic clinical supervision (Lucas et al., 2013).

In addition to paramedic learners, paramedics are often required to work with a range of other health professionals. There is limited literature exploring the clinical placement demands faced by paramedics from other professions, however this review identified studies from nursing (Melby, 2000, 2001; Nilsson & Lindström, 2017; Wallin, Fridlund, & Thorén, 2013) and medicine (Brown & Zimitat, 2012).

2.4 The experiences of the paramedic working with learners

With the afore mentioned evolution and proliferation of university programs in paramedicine in Australia, there have been a range of innovative models of course design, from two year fast tracked degrees to three and four year degrees, and double degrees with a range of other health disciplines including nursing and health promotion (Williams et al., 2015). Each of these courses comes with its own structure and related clinical placement requirements, which has been used as an argument to suggest that

there is inconsistency in student preparedness for clinical placement (Williams et al., 2015). Despite being identified as a critical contributor to the learning experiences of students in professional experience placements (Jones, Comber, & Conboy, 2012), there is little evidence in the literature addressing the paramedic working with the learner with the majority of literature in paramedicine focusing on the learner.

The qualified paramedic workforce presents an additional challenge to the provision of consistent clinical education environment. As the profession is in transition there are a range of paramedic qualifications; some paramedics will hold a bachelor degree, whilst others may still hold the older vocational qualifications, whilst yet others may have self-initiated an upgrade of their vocational qualification to degree level through one of the many degree conversion programs offered nationally. This diversity in qualification adds a confounding factor to the level of awareness and expectations paramedics might have of the needs of the students whilst in their learning environment (O'Meara et al., 2015; Wray & McCall, 2009). Whilst there is a gap in the literature on much of the paramedic education environment, there has been some commentary on how this diversity might be affecting undergraduate students during clinical placements. For example, Wray and McCall (2009) suggest that qualified staff with a lack of awareness of the curriculum may contribute to the negative experiences of students and the shift from the on the job model to the tertiary model may create a feeling of unpreparedness to teach university students. Whilst this may be a self-limiting issue as the profession continues to transition to a fully tertiary model, there is a continued potential in the absence of adequate support and the use of both education models for this to continue.

In a series of review articles outlining mentorship in paramedic practice in the UK, Sibson and Mursell attempt to draw from the experiences of other disciplines to explain the journey of mentorship (Sibson & Mursell, 2010a, 2010b, 2010c, 2010d). The

challenge these articles present is their attempt to transfer knowledge from a different professional culture and work environment to paramedicine. This has been identified a difficult translation to make due to the differences between the two professions and their respective scopes of practice (Wongtongkam & Brewster, 2017).

Four articles were identified that discussed the existence of a current or past education or support program for paramedics working with learners. Pons et al. (1985) describe a program operated in Denver in the United States (US) which involves a selection process for senior paramedics that on appointment as field instructors, provide education and support to new paramedics. This program highlights a selection process which includes minimum length of service, a willingness to teach, ability to relate to learners and an ability to supervise and instruct. The article does not detail any education provided to the paramedic preceptor though. Another study from the US comes from Krochmal et al. (1995) and describes a similar program in New Haven. The New Haven program has similar selection criteria and outlines a training and ongoing development program that includes an initial four-hour training program followed by professional development in monthly team meetings. Both programs highlight a lack of reward for performing the role other than the prestige of being a paramedic field instructor and improved motivation to participate in the program (Krochmal et al., 1995; Pons et al., 1985). Fayers and Bates (2011) presented a discussion paper, not founded on research or formal evaluation, regarding the introduction of a course for paramedic 'practice educators' in the UK. Janing and Sime (2001) described the challenge faced by ambulance services in the US to ensure inter-rater reliability between paramedic preceptors, and described a two day case-based learning activity used to improve assessment reliability in paramedic preceptors. There are a number of other studies that discuss the need for the development or provision of training and education to preceptors (Carver, 2016; O'Meara et al., 2015), however no studies were

found that present an evaluation of existing formal or in-depth preceptorship training to inform the evidence base.

2.4.1 Emerging literature on the paramedic perspective.

As stated in Chapter 2, Section 2.1.1 following the initial review of literature, and during the conduct of this study, the literature in the field of paramedic education was monitored and the review updated accordingly. During this time two research studies were undertaken with a focus on the preceptor experience. The first of these was a small study funded by HWA into paramedicine clinical placements in Victoria and Auckland, New Zealand (O'Meara, Williams, et al., 2014), the second was a doctoral study of paramedic preceptors in NSW (Carver, 2016). In addition a doctoral study undertaken by Devenish (2014), investigated the topic of paramedic professional socialisation, which incorporated evidence regarding the clinical learning environment.

O'Meara, Williams, et al. (2014) undertook a study of clinical placement quality composing a curricular review of five Australian university entry level degrees as well as exploring both student and clinical instructor perceptions of placement, drawing participants from the Australian state of Victoria, and from New Zealand. With regard to the clinical instructor component of their study, 15 instructors were interviewed, providing a cross-section of university and vocationally trained paramedics. The key findings related to the paramedic perspective in this study were; that there was a variation in understanding about the purpose for clinical placement and the role of clinical instructors during the placement; that shorter placements were a logistical challenge and provided less consistency and continuity for the learner; that there is a need for improved communication and greater interaction with universities to enable paramedics to prepare for the placement; a need for organisational change to give paramedics choice in working with learners and time to perform functions related to

working with a learner; and finally the need for a structured education program for paramedics addressing their role in working with learners.

Carver (2016) undertook a study of the lived experiences of paramedic preceptors, in which he undertook qualitative interviews with 11 paramedics working in NSW, Australia. This study explored the preparedness, challenges, benefits and support provided to paramedic preceptors, but was limited to their experiences in working with graduate or trainee paramedics in the first year of their transition to the paramedic workforce. This study identified the multidimensional role performed by a paramedic preceptor, incorporating the functions of coach, role model, socialiser and protector for learners which informed his development of a framework for understanding paramedic preceptorship. Another finding of Carver's research was the lack of preparedness and training in the preceptor role, and his proposal of a training curriculum to address this gap, which he proposed should be mandatory prior to undertaking the role.

Devenish (2014) undertook a study of professional socialisation in university educated paramedics in Australia and the UK. This study explored the levels of paramedic socialisation experienced by paramedic graduates throughout childhood and adulthood prior to paramedic education (anticipatory socialisation); during paramedic education (formal socialisation); during their initial employment as a paramedic intern (post-formal socialisation); and finally following their internship, in the early stages of their career as qualified paramedics (post-internship socialisation). In this final stage of professional socialisation the newly qualified paramedics encountered new responsibilities beyond being independent in their clinical practice, including the need to train new interns or vocational trainees. This study found that paramedics did not consider themselves adequately prepared for this new training role during their early career, as they were attempting to consolidate their own independent practice while

now also being required to develop someone else's practice (Devenish, Clark, & Fleming, 2016; Devenish, 2014)

2.5 Clarity of nomenclature in the paramedic literature.

Throughout the review of literature for my research it becomes increasingly evident that there is no common or standardised terminology used to describe or define the role or position a paramedic holds when working with a learner. O'Meara and colleagues found that in paramedicine there was diversity in terms used that included paramedic instructor, clinical instructor, supervisor, mentor and clinical educator (O'Meara et al., 2015). Throughout my review of the paramedic literature, authors use a range of terms such as mentor (Armitage, 2010; Cooper, 2005; Henderson, 2012; Sibson & Mursell, 2010a, 2010b, 2010c, 2010d), preceptor (Janing & Sime, 2001; Margolis et al., 2009; Wongtongkam & Brewster, 2017), clinical instructor (Boyle et al., 2008), practice educator (Fayers & Bates, 2011), supervisor (Bury et al., 2007; Michau et al., 2009) and clinical educator (Wray & McCall, 2009), as well as other authors that referred to multiple terms in the one article (Kilner, 2004; O'Meara, Hickson, & Huggins, 2014; O'Meara et al., 2015; Pointer, 2001).

This lack of clarity is not limited to paramedicine, titles across the health care industry to describe this role include preceptor, mentor, clinical supervisor and clinical instructor (Health Workforce Australia, 2010). In an attempt to address the confusion Health Workforce Australia (HWA) attempted to introduce a single term, clinical supervisor (Health Workforce Australia, 2010) to all professions including paramedicine, however during national consultations they found the use of this term would face opposition due to the meaning attributed to that term in some health disciplines (Health Workforce Australia, 2011). The terms used themselves are only part of the problem however, as defining the meaning of the terms and what is expected of people fulfilling the roles

they describe is essential in achieving performance. One Australian study of paramedic academics found that the meaning of the term mentor was unclear, with participants shown to be unable to define the term (Furness & Pascal, 2013). The range of terms used to reflect the role of paramedics working with learners, and the degree to which they appear to be being used interchangeably constitutes a risk to expectation management, and role uptake.

2.6 Chapter summary

This literature review has focussed on what is known, or became known during the conduct of this research, in the field of paramedic clinical education. Articles were predominantly from the perspective of the learner, with limited evidence surrounding the experiences of the paramedic working with learners. This review has highlighted a lack of standards and consistency in professional learning experiences, a lack of preparation for the learning experience for both the learners and the paramedics they work with, resulting in the potential for missed learning opportunities. With limited literature addressing the perspective of the paramedic, authors have attempted to draw from student perspectives some degree of commentary on preceptor preparedness, demonstrating gaps in what is known about this important topic.

Chapter Three – Methodology

3.1 Introduction

Chapter three outlines the methodology for this research, followed in Chapter 4 by a description of the methods used in generating data aligned with my chosen methodology. This chapter describes grounded theory, its origins, guiding principles and divergences in the methodology over time and concludes with a justification for my choice of grounded theory and, more specifically, constructivist grounded theory in this study. I provide justification of my selection of constructivist grounded theory methodology as well as an explanation of my place in the research as a paramedic, educator and researcher. Chapter four will then discuss the operationalisation of constructivist grounded theory in this research study.

3.2 Grounded theory as a social sciences research methodology

Grounded theory is a research approach that has its origins in the work of two sociologist researchers, Barney Glaser and Anselm Strauss. Glaser and Strauss observed that at the time (the late 1960's), qualitative research methods used by sociologists were more aligned to verifying previously identified theory rather than acting to identify or propose new theory (Glaser & Strauss, 1967). This observation led to these authors proposing a new research approach that would allow researchers to explore their data and identify new theory through an inductive process. Glaser and Strauss identified that their initial proposal of grounded theory was a “beginning venture” (Glaser & Strauss, 1967, p. 1) intended to establish new ways of discovering theory. Indeed since

the original publication of their text, the grounded theory approach has evolved, with authors proposing variations to the methodology building on this *beginning venture*; including variations by the original authors themselves, along with several others (Charmaz, 2006; Charmaz, 2014; Corbin & Strauss, 2008; Dey, 1999).

Glaser and Strauss initially defined grounded theory simply as “*the discovery of theory from data*” (Glaser & Strauss, 1967, p. 1). Whilst this definition seems light, they then go on to provide an exhaustive definition and further explanation throughout their text. There have been numerous texts and articles written subsequent to the seminal text from Glaser and Strauss, which provide more detailed definitions. Charmaz defined grounded theory as a set of “*systematic yet flexible guidelines for collecting and analysing qualitative data to construct theories grounded in the data themselves*” (Charmaz, 2006, p. 2). This second definition demonstrates that grounded theory is not simply an approach to data analysis, but also guides the process from the earliest steps in data collection through to data analysis to establish theory. Earlier Glaser described grounded theory as a *total methodological package* (Glaser, 1999, p. 836) that takes the researcher along the pathway from concept, through data collection and analysis in a systematic way that leads to a publishable theoretical product. This is further reflected in Charmaz’s assertion that grounded theory is both method and methodology as it serves not only as the guiding approach for research (methodology) but also the structured tools used in the application of the research approach (method) (Charmaz, 2017).

The functional premise of grounded theory is to forestall the generation of deduced theory not in evidence within the data. Glaser and Strauss identified examples of theory being deduced from empirical studies, or from *apriori* assumptions that may have dubious validity and suggested that grounded theory will be more successful by

proposing theory that can be grounded in the data (Glaser & Strauss, 1967). This is not to say that the grounded theory researcher approaches the problem as a clean slate, as the majority of researchers will come to a problem with a degree of knowledge of the local concepts in their field of research. However this existing knowledge acts as a foothold rather than a deeper understanding of the research problem (Glaser & Strauss, 1967).

3.3 Principles and guidelines for the conduct of grounded theory

Glaser and Strauss (1967, p. 32) proposed that theory is a process and that it is continually evolving, rather than being a perfected product. This concept underpins many of the central elements of grounded theory, including the following elements described by O'Reilly, Paper, and Marx (2012):

- Theoretical sampling
- Theoretical sensitivity
- Constant comparative analysis
- Theoretical saturation
- Theoretical coding

Each of these concepts provide the researcher with a set of principles and guidelines for the conduct of research and are discussed individually below.

3.3.1 Theoretical sampling

In their 1967 text, Glaser and Strauss identified theoretical sampling as being a process of data generation in which the researcher undertakes data collection, coding and analysis simultaneously, allowing the researcher to decide what other data to collect and from where, enabling the emergence of theory throughout the process. In practice

this translates to the capacity to either remodel the data collection process as the research progresses in response to emergent concepts or to return to earlier data to explore the presence of emergent concepts that might not have been identified initially (Glaser & Strauss, 1967).

Theoretical sampling is an active sampling approach in that sampling must be a constant, active process in concert with constant analysis that follows the emergence of categories within the data. To that end it is not possible for a grounded theory researcher to state at the outset of their study how many subjects, or groups, will make up the sample. The best that the grounded theory researcher can do is provide a total figure at the completion of the research process (Glaser & Strauss, 1967). This aspect of grounded theory can prove to be a challenge for institutional research groups, where to gain ethical clearance it is often necessary to provide an insight into the number within a sample at the outset of the study. Charmaz and Keller (2016) discussed this in the context that grounded theory is a process of exploration and discovery in the data and suggested that researchers need to begin with sensitising concepts which allow the research to follow insights that occur throughout the process, something that cannot be achieved prior to being exposed to the data (Charmaz & Keller, 2016). In the absence of a defined sample size within grounded theory, the end point for sampling is defined by the concept of theoretical saturation (Guest, Bunce, & Johnson, 2006) which will be discussed later in Section 3.3.4.

As a consequence of the above process, sampling in grounded theory is largely controlled by the emergence of concepts that lead to theory generation as opposed to being controlled by the restraints applied by a rigid methodology. More traditional researchers may have found themselves identifying areas of relevance but have been restrained from following these due to sampling rules within their study. This

restriction in sampling can result in the researcher missing key data or becoming subject to misconception (Glaser & Strauss, 1967) or deduction. It has been suggested that the use of the term *sampling* in the concept of theoretical sampling has led to confusion for some researchers (Moore, 2010). Sampling in the context of its more traditional definition refers to the selection of a set of research participants that will inform a field of inquiry whereas, in grounded theory theoretical sampling, it comprises both this traditional definition as well as guidance for the researcher in regards when to return to previous data for comparative analysis.

Theoretical sampling in grounded theory, therefore, requires the researcher to continually ask the question “*what groups do I turn [or return] to for data next and based on what theoretical purpose*” (Glaser & Strauss, 1967, p. 47). Glaser and Strauss referred to such groups when discussing comparative analysis and defined them as being both a group of people or a single person (Glaser & Strauss, 1967). The capacity to achieve successful grounded theory emergence, therefore, is influenced by the theoretical sensitivity (discussed later in Section 3.3.2) of the researcher to establish the theoretical relevance of the sample groups. Theoretical relevance refers to how well the research subjects fit with the direction of the research and theory emergence. The decision on which research subjects (or groups) to include in grounded theory is guided, therefore, by the establishment of their theoretical relevance both at the outset of the research and in response to emerging categories throughout the research (Glaser & Strauss, 1967). In the investigation reported here, for example, that is an investigation of the preparedness of paramedic preceptors to perform the role of preceptor, it is necessary to ensure that a reasonably broad participant group is selected at the outset. This would include (but not be limited to) covering organisational variables through the inclusion of cross jurisdictional groups, as well as addressing educational variables through the inclusion of the widest variation in paramedic educational approaches

possible. Theoretical relevance of the groups would then continue to be refined through the nature of the data and direction in which the data takes the researcher.

3.3.2 Theoretical sensitivity

The concept of theoretical sensitivity is central to grounded theory and has been described by Corbin and Strauss (2008) as being *“in-tune to the meanings embedded in data”* (Corbin & Strauss, 2008, p. 231). Without the capacity to identify meaning within the data and direct the sampling approach according to the direction that the meaning leads, the researcher will be unable to succeed in grounding their theory in the data. Theoretical sensitivity represents the capacity of the researcher to see the detail within the data, the subtleties and emerging concepts gained through having insight into the data. This is achieved through immersion in the data as well as being influenced by the researcher’s past personal and professional experiences (Hussein, Hirst, Salyers, & Osuji, 2014). To develop their theoretical sensitivity the researcher looks at the data from a range of vantage points, including retrospectively and from a number of sources to identify meaning and novelty, thereby remaining open to the theoretical possibilities of the data (Charmaz, 2014).

3.3.3 Constant comparative analysis

Comparative analysis is a general research technique used across a number of methodologies and has been defined as the process of *“comparing incident against incident for similarities and differences”* (Corbin & Strauss, 2008, p. 195). Comparative analysis in grounded theory is a constant, active process, whereby data from one group can be compared with that of others, both prospectively and retrospectively. Where a grounded theory researcher explores the data and identifies a category in the data, that category is coded either as a new code or is added to an existing code. In the pursuit of the theoretical relevance of a newly identified category, the researcher will often find it

necessary to return to older data (such as interviews) to explore the presence of newer categories (Corbin & Strauss, 2008). Also, during this time the researcher should consider the target groups of future theoretical sampling to follow the newly emerging categories, as described in Section 3.3.1.

3.3.4 Theoretical saturation

Glaser and Strauss (1967) initially defined theoretical saturation as being reached when *“no additional data are being found whereby the sociologist [researcher] can develop properties of the category”* (Glaser & Strauss, 1967, p. 61). This definition has been subject to question since its publication due to the lack of clarity about its meaning, with some researchers exploring the extreme variations of categories to achieve this standard (Guest et al., 2006). To avoid this extreme approach, Guest and colleagues operationalized the definition of theoretical saturation to mean *“the point in data collection and analysis when new information produces little or no change to the codebook”* (Guest et al., 2006, p. 65). This operationalization of the concept is in line with the more recent definition of theoretical saturation provided by Corbin and Strauss (2008):

“The point in analysis when all categories are well developed in terms of properties, dimensions, and variations. Further data gathering and analysis add little new to the conceptualisation, though variations can always be discovered”
(Corbin & Strauss, 2008, p. 263).

While there is no specific directive that the researcher should follow to know when they have achieved data saturation, early in their theorisation of grounded theory Glaser and Strauss (1967) proposed three criteria for determining theoretical saturation; these being the empirical limits of the data, the integration and density of the theory and the theoretical sensitivity of the researcher.

3.3.5 Theoretical coding

Theoretical coding is an iterative process by which grounded theory researchers categorise similar incidences within the data, allowing them to develop an awareness of the dimensions of the data in a particular category (O'Reilly et al., 2012). Through this process, categories and subcategories are developed until all relevant data has been coded. This is not to say that data is analysed in the same way as content analysis (Charmaz & Keller, 2016), as grounded theory coding goes beyond incidence to analysing the data for meaning and coding that meaning. Through coding in this manner, the researcher is able to develop an understanding of the relationship and commonalities between codes, and thereby to identify what Glaser and Strauss called the *core category* which provides the basis for theory generation (Glaser & Strauss, 1967).

3.3.5.1 Memoing

Memoing in grounded theory has been described as a “*pivotal intermediate step between data collection and writing drafts of papers*” (Charmaz, 2014, p. 162) and as such occurs throughout the coding and analysis process. Memos act as a series of points in the analysis process where the researcher can stop and analyse the codes they have generated, in conjunction with their own ideas forming from those codes. The goal of memoing, therefore, is to aid the researcher in developing ideas that become theoretical notes about the data that can inform further theoretical sampling (Glaser, 2004) and eventually enable theory construction. Memos can be of any size depending on their purpose, and can be built upon by successive memos as the analysis evolves (Birks & Mills, 2015; Charmaz, 2014; Corbin & Strauss, 1990).

Memos enable the researcher to break down codes and show links or relationships between the codes; develop meaning from the codes; focus the direction of further

data collection; and incorporate critical reflexivity (thinking critically about the impact of our assumptions, values and actions) into the research (Charmaz, 2014). As such, memoing is not limited to the coding process, rather the researcher can use memos at any point in the analysis following initial data collection, during both initial and focussed coding, during their review of the literature and even as they are writing about their findings (Glaser, 2004). The construction of memos in grounded theory is personal in nature; there is no standard format to be followed and typically memos are for the use of the researcher rather than for public consumption, as their role is to inform the continually evolving analysis (Charmaz, 2014). My use of memos in this research is discussed in more detail in Chapter 4, Section 4.3.3.

3.4 The impact of prior knowledge and experience

To be suitably theoretically sensitive, the researcher's own personal characteristics (personality and temperament) combine with their ability to gather insight into the research and use that insight. In their initial proposition of grounded theory Glaser and Strauss suggested that capacity to gather insight can be compromised where the researcher comes to the study with preconceived theory (Glaser & Strauss, 1967). As mentioned previously, researchers rarely come to the research problem with a clean slate. However, authors of the original proposition for grounded theory warned researchers of the risk of developing a preconceived theory drawn from their own experiences, which might then remove their capacity for identifying new theory emergence or the recognising novelty in the data (Glaser & Strauss, 1967). This warning is key to some of the more prominent divergences in grounded theory that have occurred over time, these being the role of literature in the research process and the role of the researcher's past experiences and *apriori* assumptions in conceiving theory. Corbin and Strauss acknowledged that a researcher's knowledge and

experience enables them to respond to what is in the data or to respond to and receive messages contained in the data (Corbin & Strauss, 2008) as categories emerge.

Charmaz expanded on this notion further by stating that grounded theory researchers *construct* their theory out of the data, as opposed to it emerging in isolation from the researcher (Charmaz, 2006; Charmaz, 2014). Following this perspective, whilst the end point of grounded theory research - the theory itself - may have been constructed by the researcher based on both the data and their own prior experiences of the phenomenon, it is reasonable to state that the categories and properties do still emerge during data collection.

The literature review has a proven and time-honoured place in the conduct of research and research higher degrees. It serves to reflect a landscape of what is known in the area being studied and to inform the focus of the research (Hart, 2018). Despite this, in the context of grounded theory the position of the literature review has been the focus of disagreement regarding when and to what extent the literature review should be conducted (Dunne, 2011). Originally Glaser and Strauss (1967) advised grounded theory researchers to ignore the literature prior to the study being conducted, a position which contributed to a divergence in opinion between Glaser and Strauss in their later publications that provided detailed guidance on method. Dunne explained that this initial hard line position was relaxed to varying degrees by both Glaser and Strauss, although more so by Strauss in his later collaborations with Juliet Corbin (Dunne, 2011). The debate on the role of literature reviews in grounded theory continued, evolving toward a question of *when* a review should be used rather than *if* it should be used (Dunne, 2011). It must be stated, however, that even in their initial proposition of the method, Glaser and Strauss (1967) did not actually advise researchers not to refer to literature, rather they stated “*Similarities and convergences with the*

literature can be established after the analytic core categories have emerged" (Glaser & Strauss, 1967, p. 37).

Some authors have acknowledged the literature as a source for the conceptualisation of the research problem, whilst also cautioning against becoming enamoured with the established theories it contains (Charmaz, 2006; Corbin & Strauss, 2008). Therefore some proponents of grounded theory research have continued to caution to some degree against exhaustively reviewing or becoming steeped in the literature surrounding the research, prior to data collection and analysis (Charmaz, 2006; Corbin & Strauss, 2008). In contrast, Charmaz (2014) suggested that the literature review contributes to the constant comparative analysis used in grounded theory as the researcher compares their categories with the findings of other researchers, with the literature being woven throughout the discussion (Charmaz, 2014). Dunne (2011) proposed a middle ground that ties in with researcher reflexivity, suggesting that the researcher should be able to apply the principles of reflexivity to their review of the literature through the use of memoing, to show their reflection on the impact of ideas within the literature (Dunne, 2011). Finally, Dey made the point that *"there is a difference between an open mind and an empty head"* (Dey, 1999, p. 251), a sentiment that can be extended beyond the researcher's experience to the role of literature in the research process.

3.5 Variations in grounded theory over time

Since its initial publication in 1967, therefore, the nature of grounded theory has evolved, with divergences occurring between the approach used by its initial proponents as well as new iterations developed by other subsequent researchers (Charmaz, 2006; Charmaz, 2014; Cooney, 2010; Heath & Cowley, 2004; O'Reilly et al., 2012). This evolution has resulted in what could be broadly termed as three schools of

grounded theory; a Glaserian school of Grounded Theory and a Straussian school of Grounded Theory (Walker & Myrick, 2006) which constitute the objectivist approaches to grounded theory and, more recently, a constructivist school of grounded theory based, on the adaptations of Charmaz (Charmaz, 2006; Charmaz, 2014). The central theme of the divergence in grounded theory between the three variations relates to how the researcher interacts with and derives meaning from the data (Charmaz, 2014; Cooney, 2010; Walker & Myrick, 2006).

In the traditional Glasserian approach the researcher stands apart from the data, as a *non-knowing researcher* uninfluenced by preconceptions and follows a set of prescribed rigorous procedures that must be adhered to in order for theory to emerge from the data (Jones & Noble, 2007). In contrast, the Straussian approach has a greater degree of flexibility and acknowledges that the researcher does not come to the research as *tabula rasa* (Corbin & Strauss, 2008; Dey, 1999), and is able to utilise prior knowledge and experience to enhance their sensitivity to the data (Corbin & Strauss, 2008; Jones & Noble, 2007). This element of the Straussian approach to grounded theory, led Glaser to suggest that this is in effect forcing theory from the data into preconceived categories (Jones & Noble, 2007), a matter that has resulted in extensive debate over the years.

The constructivist approach to grounded theory takes the view that the researcher not only comes to the research with prior knowledge and experiences, but also that the researcher is an actor in the research process and as such, impacts the end product through how they interact with the data and data analysis (Charmaz, 2006; Charmaz, 2014). Charmaz clarified the issue of 'forcing the data' raised by Glaser from the constructivist point of view by stating "*we do not force preconceived ideas and theories*

directly upon our data. Rather we follow leads that we define in the data, or design another way of collecting data to pursue our initial interests” (Charmaz, 2006, p. 17).

Also subject to disagreement across the schools is the structure of coding approach grounded theory researchers use in exploring their data. Within the two objectivist schools (Glasserian and Straussian) the differences were reflected by Glaser in *The Discovery of Grounded Theory* (1967) who advocated for the two stage coding process outlined in that text (open/substantive coding and theoretical coding). Subsequently, through his collaborations with Corbin, Strauss introduced a three stage coding process (open coding, axial coding and selective coding) (Cooney, 2010). The Straussian approach to coding remains in a state of flux, with axial coding being considered a distinct stage of coding in earlier publications by Strauss and Corbin. However, more recently axial coding has been described as hand in hand with open coding, and the distinction between the two is for explanatory purposes only (Charmaz, 2006).

The original coding process to which Glaser held true was designed around a purely inductive process in which theory emerges from the data, whereas Strauss began in his later works to indicate that induction, deduction and verification are all required in grounded theory (Cooney, 2010). The constructivist approach to grounded theory provides greater flexibility, however, in relation to coding; it includes initial coding and focussed coding without the need for a third stage. Charmaz defended this position, arguing that there is often no need for further coding such as theoretical coding in order to construct theory (Charmaz, 2006; Charmaz, 2014).

It is important to make clear at this point, however, that whilst grounded theory underwent a divergence, the individual approaches still hold true to many of the central principles of grounded theory mentioned earlier. Each version of grounded theory still follows the principles of theoretical sampling, constant comparative analysis,

theoretical saturation, theoretical sensitivity and theoretical coding with the generation of theory as the end point (Charmaz, 2014; Walker & Myrick, 2006). A summary of the key variations between the schools of grounded theory is illustrated in Table 3.1.

	Glaserian School	Straussian School	Constructivist School
Emergence and researcher distance	Theory emerges from the data; researchers stand apart from the data which is informed only by the world under study	The researcher has a more active role making use of their prior knowledge and experience to enhance their theoretical sensitivity	The researcher acknowledges their own perspectives when coming to the research and how they interact with the data.
Development of theory	The goal is the development of a conceptual theory relevant to the research field	The development of a conceptual theory, however in later works it was acknowledged that grounded theory can also be used for non-theory purposes	The construction of theory grounded in the data whilst impacted upon by the involvement of the researcher.
Procedures	Set of rigid, non-optional procedures that must be followed.	Set of distinct procedures however the researcher can elect which they use within the grounded theory approach	Set of systematic and flexible guidelines in the collection of data, analysis of data and construction of theory
Core category	Formulation of theory that underpins a core category, being the main area of concern for the research participants	The main theme that integrates all other categories within the data.	Focuses on construction of theory that is underpinned by multiple social realities reflected in the data and their interpretation by the researcher, rather than on a core category.
Coding	Open, selective and theoretical	Open, axial and selective, with selective being viewed as a forcing mechanism in the 1990's. Axial coding was emphasised more in the earlier versions, but recognised as a component of open coding in 2008 (Corbin & Strauss, 2008)	Initial, Focussed and theoretical.

Table 3.1. Contrast between Glaserian, Straussian and Constructivist schools of Grounded Theory. Adapted and updated from *Table I. Contrasts between and within Glaserian and Straussian schools* (Jones & Noble, 2007)

3.6 Selection of constructivist grounded theory for my research.

As stated in Chapter 1, Section 1.6, I come to this research with a substantial background as a paramedic, paramedic educator and, to a lesser degree, researcher. Additionally, as a mature graduate research student I come to this research with an established world view, incorporating my own perspective on the formation of knowledge and understanding, and how this informs or influences behaviour and performance. I also bring with me a range of preconceptions and beliefs specific to the research question that I have acknowledged and managed reflexively in the research process as described in Chapter 1, Section 1.6.1.

In selecting an approach for grounded theory studies it was important for me to understand the variance between the three schools of study, and to follow one distinctly rather than attempting to merge the three approaches to avoid combining research techniques that might not be compatible (Cooney, 2010). As discussed, constructivist grounded theory has evolved to incorporate guiding principles for researchers coming to their study with prior experiences, perspectives and knowledge on their field of investigation. These guiding principles allow the researcher to understand and acknowledge how they have affected the research, from question development, through to coding and analysis and final theory construction (Charmaz, 1996). In my decision to use constructivist grounded theory I acknowledged my prior knowledge and recognised the importance of and need to balance my prior knowledge with reflexive analysis through the use of memos and a self-awareness that enabled me to remain open to the inductive process of the methodology (Charmaz, 2014; McGhee, Marland, & Atkinson, 2007)

The constructivist grounded theory continues to follow the broad tenants of an inductive, emergent and open ended iterative approach, however, it takes the methodology further to a level of critical inquiry that involves active researcher involvement and reflexivity (Charmaz, 2017). Through the open and honest application of reflexivity (Koch, Niesz, & McCarthy, 2014) I see constructivist grounded theory as the model most suitably aligned to my research question and field of study. This approach allows for investigation in the absence of prior theory or defining knowledge and accommodates my prior experiences in the field.

3.7 Chapter summary

During this chapter I have outlined grounded theory and explained its evolution into three schools, two objectivist schools (Glaserian and Straussian) and one constructivist school (Constructivist). The methodology of grounded theory has been explained and I have outlined in this chapter why I have selected constructivist grounded theory for this study. I have argued that whilst there have been tensions between the objectivist and constructivist approaches to grounded theory for some time, the methodology has become arguably the most commonly used qualitative research methodology (Charmaz, 2017) and lends itself well to fields of endeavour such as paramedicine in which there is limited or no pre-existing theory or knowledge. Furthermore, and of importance in the present study, grounded theory allows for the inductive analysis of social interaction, shared meanings and interpretations of participants on a given topic (Hansen, 2006).

In Chapter four I will outline the operationalisation of constructivist grounded theory in this study, describing how the core principles and guidelines were implemented in my research. This will be supplemented by an outline of the theoretical perspectives that I used to analyse the data, in the subsequent results chapters.

Chapter Four – Methods

4.1 Introduction

The following chapter outlines the application of the constructivist grounded theory approach to answer the question *How do Paramedics view their readiness and preparedness to perform the preceptor role*, providing detail around ethical considerations, how data were collected, how analysis was conducted, and how the principles of grounded theory were followed. The challenges associated with adhering to grounded theory in the conduct of this research will also be outlined, along with how I addressed these challenges to adhere to grounded theory principles, whilst working within a defined and tight deadline for data collection periods. The chapter will conclude with an explanation of the underpinning theoretical perspectives, Symbolic Interactionism and Role Theory, which are then used throughout the analysis of data in this research.

4.2 Ethics

Ethics approval for this study was obtained from the University of Tasmania Human Research Ethics Committee in February 2013, approval number H0013034. An amendment to the original ethics approval to allow modification from face to face interviews to interview by telephone was obtained in December 2014.

4.3 The research process

Figure 4.1 provides a visual representation of the research process undertaken in this study, showing the trajectory from sampling, through to conduct of interviews, initial

note taking and memoing to achieve preliminary codes and inform progress towards saturation.

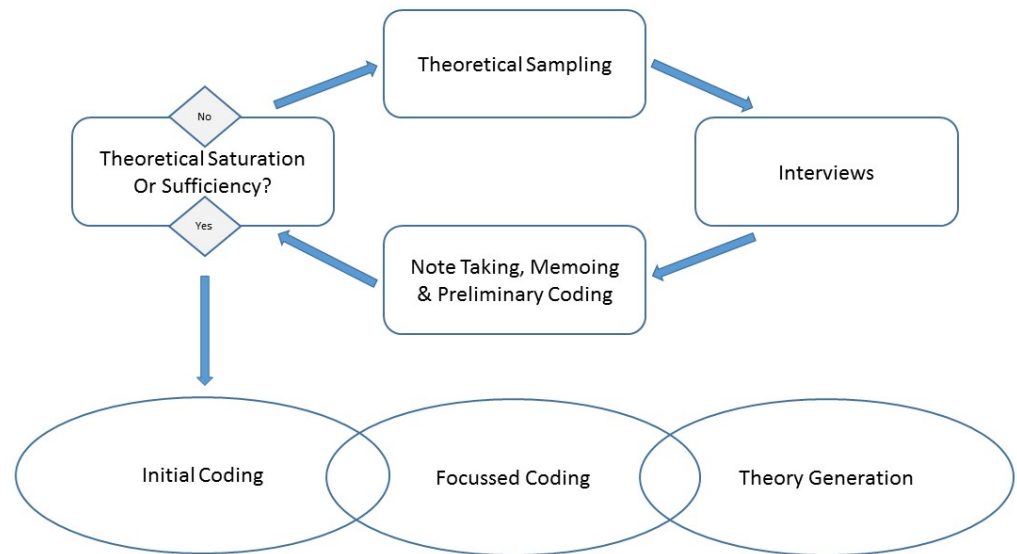


Figure 4.1. Flow of the research process applied to this study (Copyright Dale Edwards 2018)

4.3.1 Theoretical sampling

4.3.1.1 Sampling approach in this research

The purpose of this research was to identify the readiness of preceptors to work in a clinical teaching role with a variety of student types, and within a variety of occupational environments. One of the reported pitfalls in grounded theory research is the failure to use theoretical sampling to explore the data outside the researcher's initial concentration site (O'Reilly et al., 2012), which is sampling location that gives rise to the research interest. The theoretical sensitivity of the researcher is the factor that will enable them to see beyond the saturation of data within the concentration site and recognise the need for wider participation in the study. To contextualise theoretical sensitivity in my research, if the investigation of the role preparedness of paramedic

preceptors was limited to those preceptors within one jurisdiction (i.e. Tasmania), this being the initial concentration site, then the data may well become saturated.

However, this saturation will not be generalisable beyond the initial concentration site, as it does not accommodate for broader organisational, cultural, educational and clinical settings each affecting the research field. Theoretical sensitivity therefore, starts at the outset of the research process and continues as the researcher follows the data and the categories emerging from data throughout the research process.

In order to address this potential pitfall, the sampling plan in this research was developed with population diversity in mind. The educational model of paramedics across Australia has undergone considerable change in recent decades as ambulance services discontinue the older vocational training models, and adopt a university pre-employment model (Edwards, 2011). Whilst this change has been occurring over a number of decades, both models have existed in parallel in the industry during this time. To ensure heterogeneity in the sample, it was necessary to attempt recruitment of participants from both educational models.

To achieve sufficient heterogeneity, paramedics in two Australian ambulance services were identified as potential participants, these being Ambulance Tasmania (AT) and the New South Wales Ambulance (NSWA). These two states were selected for two reasons; firstly, during the study period, the two state ambulance services represented different versions of educational environments in paramedicine - Ambulance Tasmania operated as a graduate paramedic employment model, while NSW employed a combination of the traditional apprenticeship model as well as graduate intakes. Secondly the two services differ in size. New South Wales Ambulance is a substantially larger service than AT with quite different hierarchical structures. Both services provide clinical placements for students from a number of Australian universities and both ambulance services, at

the time of the study, operated their own internal ICP education program. These differences provided a wide range of participant experience, with varying experiences in type of student and paramedic relationships, varying educational models, diversity in rural versus urban environments, and organisational size, structure and culture differences. Table 4.1 provides a breakdown of the relevant differences between the two services at the outset of data collection.

Table 4.1. Comparison of key variables between NSW and AT (The Council of Ambulance Authorities, 2013)

Comparison	NSW	AT
Qualified Paramedics	2599	207
Students and base level officers	518	31
Apprentice model employment intake	Yes	No
Graduate model employment intake	Yes	Yes
Annual ambulance responses (workload)	1,219,000	85,000
Ambulance stations and locations	268	49

4.3.1.2 Participant recruitment

Participants were recruited through an invitation to participate, sent by electronic mail to members of the professional bodies, Paramedics Australasia (PA) for paramedics in Tasmania, and the Australian and New Zealand College of Paramedicine (ANZCP) for paramedics in New South Wales (Refer to Appendix 4 for a copy of the invitation to participate, and Appendix 3 for the information sheet provided at the time of invitation). The inclusion criteria for this study, highlighted in the invitation to

participate, required participants to be paramedics or intensive care paramedics that work with students. Paramedics who volunteered to participate in this study were allocated a pseudonym to ensure anonymity of data. Pseudonyms allocated reflected the gender of the participant and were generated using the same first letter of the participants name for improved recall during analysis. For example, a participant named Dale might be allocated the pseudonym David. Table 4.2 outlines the application of theoretical sampling in participant recruitment and the sampling considerations I used. These being, gender, state, and nature of qualification. This table is not presented as data in this context but a representation of the application of theoretical sampling, the detail within the table is analysed throughout the remaining chapters in context with emerging categories in the data.

As discussed in Chapter 3 Section 3.3.1, in grounded theory research the researcher is unable to identify the number of participants required to reach theoretical saturation at the commencement of the study. Sampling is initially driven by the researcher's identified target population, and subsequently by the principles of theoretical sensitivity and theoretical sampling. The cycle reflected in Figure 4.1 was undertaken several times as theoretical saturation or sufficiency was evaluated, and each time this point in the cycle was reached, a decision was made on further sampling, as discussed (see Section 4.3.3) or progression to the next stage in coding. As a consequence of the application of theoretical sampling, not all paramedics that volunteered were interviewed. As the categories emerging from the data became saturated (see Section 3.3.4) sampling was able to be more focussed or discontinued. No further exclusion criteria were applied to those that volunteered to participate.

Table 4.2. Participant Demographics

Pseudonym	Gender	State	Length of Service (YRS)	Model of Education Experienced	Education Provider [#]	Ambulance Services Worked In
William	M	TAS	Unknown	Vocational	QAS	QAS, AT
Brian	M	TAS	Unknown	Vocational	AT	AT
Lisa	F	TAS	6	University	Monash	AT, AV
Simon	M	NSW	20	Vocational	NSWA	NSWA
Richard	M	NSW	30	Vocational	NSWA	NSWA
Ira	M	NSW	24	Vocational	NSWA	NSWA
Julie	F	NSW	8	Vocational	NSWA	NSWA
Charles	M	NSW	19	Vocational	NSWA	NSWA
Michael	M	NSW	7	Vocational	NSWA	NSWA
Chris	M	NSW	3.5	University	CSU	NSWA
Tony	M	NSW	2	Vocational	NSWA	NSWA
Roger	M	TAS	13	Vocational	AT	AT
Tanya	F	TAS	1.5	University	AT	AT
Terry	M	TAS	8	Vocational	AT	AT, ACTAS
Darren	M	TAS	15	Vocational	StJ-NT	AT, AV, StJ-NT
Paul	M	TAS	39	Vocational	AT	AT
Kerrie	F	NSW	28	Vocational	NSWA	NSWA
Samantha	F	TAS	10	Vocational	AT	AT
Tracey	F	TAS	6	University	ECU	StJ-WA, SAAS
[#] Participants represent a range of career lengths, reflected by many participants being trained under the vocational model or their initial employer prior to the introduction of the tertiary model, or more recently by a university. This column reflects the training provider for the participant.						

4.3.2 Interviews as the data collection method

Participants were invited to an interview, during which they were asked a range of open ended questions related to the research question. In undertaking grounded theory research it is important to ensure that the data collection method is responsive to the emergence of concepts and categories in the data, to ensure that eventual theory is grounded with some degree of reliability in the data itself. Charmaz (2014) described intensive interviewing as an approach that is well suited to grounded theory, due to its open-ended approach in which the interviewee is someone with significant experience (incorporating either length or nature of experience) in the field being researched.

Intensive interviewing commences with an interview guide with indicative questions, but then allows the researcher to follow the direction of the data elicited in the interview, allowing for an in-depth exploration of the experiences of the participant.

Questions in an intensive interview are open-ended and make use of follow-up questions to clarify or expand on any unanticipated information elicited. Conversely more structured interviews have fixed questions, asked of each participant in the same way each time and requires prior knowledge of exactly what questions to ask (Charmaz, 2014). In my research field, little was known about the preceptor experiences, with the predominant literature focussing on the student experiences of the clinical learning environment as discussed in Section 2.4. Therefore, more structured interviews with fixed questions would not have allowed me sufficient flexibility to follow the data, in turn compromising the capacity within the data for saturation.

To accommodate the flexibility of questions in intensive interviewing, the ethics application included a set of indicative questions, which were approved, with the recognition that questions would necessarily evolve during the process of data collection. Throughout the interviews, in line with the style of intensive interviews, additional focussing questions were asked to extract meaning from the participant,

examples of these additional focusing questions can be found in Table 4.3. In a practical sense, this involved an interview by interview variation in questions that reflected the need to explore the direction of the participant's responses where needed. It also required a longitudinal variation in the questions where either; the participants described something that the researcher needed to explore further with future participants, or where the sequence of the questions needed to be refined to elicit greater clarity in responses. Longitudinal change occurred in the interview questions in response to the need to add additional focussing questions that followed the emergence of categories in earlier interviews (Appendix 5); the changed set of questions reflecting these additional focussing questions are provided in Appendix 6.

The original research plan intended that interviews were to be undertaken on a face to face basis, with the researcher and participant meeting in person at a venue of mutual convenience. To achieve this, given a proportion of the participants were in New South Wales, it was necessary to travel from Hobart to Sydney and surrounding regions for data collection. Therefore sampling of participants was conducted to some degree in blocks early in the research, and evolved across the data collection period to more targeted individual interviews as the project progressed. Interviews began in August 2013 and concluded in March 2015, with a total of 19 interviews conducted over the data collection period. This initial face to face model of interviewing was amended toward the end of the interview schedule due to difficulties in accessing participants, as a result the later interviews were conducted by telephone. This change in interview procedure is discussed in more detail in Section 4.3.5. In total 16 interviews were conducted face to face, with the final three being via telephone.

Table 4.3. Example of using unscripted focussing questions in intensive interviews.

Participant	Question	Commentary
Richard	What can you tell me about your experiences with performing the role of a preceptor?	This initial scripted question elicited answers from Richard that were highly student centred, which gave rich data on how the student impacted his experience, however he did not extend beyond the student-centric answer initially.
	...that's experiences with the actual student. What other experiences in performing the role?	By asking this additional unscripted question I was able to obtain additional data associated with how he experienced the role, what support he had experienced in the role and what aspects of his experience motivated him in the role.

Each interview lasted between 28 and 89 minutes. The interviews were audio recorded for future transcription, enabling me to listen to the recordings between each interview and make notes of those elements in the data that needed to be coded, along with allowing me to memo points for future exploration. This in effect became a preliminary coding process (see Section 4.3.3) that allowed me to work with the data whilst also conducting interviews in a confined period of time. Interview transcripts were then

generated following the initial process described, through the use of a third party transcription service, to allow for a second more detailed approach to initial coding.

4.3.3 Note taking, memoing and preliminary coding

The compressed nature of initial interviews necessitated an additional preliminary coding phase to enable the application of grounded theory in this research study. As discussed in Section 3.3.3, the principles of grounded theory require a constant comparative analysis that involves initial coding of each interview prior to the conduct of subsequent interviews. The intention behind this approach is to ensure that the data collection is responsive to the emergence of concepts and categories, and informs emerging theory construction. In this research, due to the limitations on my access to face to face interviews, it was necessary to hold the initial interviews in relatively tight timeframes, sometimes with only a matter of hours between one participant and the next. This data collection approach was dictated by the availability of both the participants, and my own availability as a researcher. The practicalities of transcribing and then coding each interview were prohibitive given the timeframes, making it necessary to explore a way of performing an initial coding and analysis process that allowed me to follow the direction of the data inside these tight timeframes.

The coding processes and associated principles of grounded theory outlined in Section 3.2 are fundamental to theory generation that is grounded in the data. A preliminary coding process was inserted into the research process in which I coded based on audio and notes prior to undertaking subsequent interviews. Coding based on notes of interviews is an approach proposed by Judith Holton to mitigate the time delays associated with transcription (Holton, 2007). The addition of the preliminary coding described here allowed me to adhere to the principles of grounded theory and remain responsive to the data. An example of the application of this use of preliminary coding

of my notes can be seen in Table 4.4. In this example the participant response gave rise to two initial codes.

Table 4.4. Example of memoing and initial notes based coding.

<p>When talking about how he dealt with a negative experience Michael referred to a student that was not very good at talking to people. The strategy he used in this case was to advise the student to rent a video called “patch Adams”, a Robin Williams movie about how surgical teams in hospitals communicated with patients.</p> <p>This suggests potential initial codes:</p> <p>Developing communication skills</p> <p>Being innovative in the ways difficult experiences are addressed</p>
--

Note taking, therefore, was actively used during the conduct of this study, however, memoing is a more formal process within grounded theory that occurs in concert with coding in which researchers record the conceptualisation of the data into analytical categories (Charmaz, 2014; Glaser, 2004). I made use of memoing to allow me to reflect on what I was observing in the data, allowing me to begin the coding process as well as inform my theoretical sensitivity to the data and the direction it was taking. Memoing also allowed me to be reflexive to the data, as discussed in Section 1.6.1 and Section 3.6, based on my own interactions with it as a researcher with extensive prior experience in the field being studied. An example of memoing is provided in Table 4.5; in this example, a number of questions emerged that I then used to revisit the previous interviews, as well as form a new focussing question reflected in the changes from the initial interview questions shown in Appendices 5 and 6.

Table 4.5. Memo example

<p>Richard speaks about how he felt he was perceived by patients when attending cases with his first student, the student was 20 years old and he was also in his 20's.</p> <p>Richard perceived that the patients were "looking for the adults". How does age influence the first experience as a preceptor? Does anyone else mention this? Can the remaining data suggest anything about the relationship age has with first experience? What about life experience?</p>
--

4.3.4 Coding

As outlined in Chapter 3, the coding process in grounded theory includes a number of stages; in this section I will outline the process applied, from the preliminary coding discussed in Sections 4.3.2 and 4.3.3 through to what Charmaz terms initial and focussed coding (Charmaz, 2014). Following block based data collection, I returned to the transcribed interview data, to conduct of a more detailed initial coding process. Grounded theory methodologies outline initial coding as something that can be done word by word, line by line, or section by section (Charmaz, 2006; Charmaz, 2014). In my research, due to the verbose nature of some of the respondents, section by section coding was applied using gerunds. To clarify, some participants spoke at length, and circuitously in answering the questions put to them, often making it necessary to code a number of sentences to a single code to capture the meaning in the data within its context, whilst others were more pointed in their responses allowing coding to more closely reflect line by line coding. The use of gerunds, action or process codes, allowed me to capture participant comments in a way that avoided preconceived concepts or themes.

Following the initial open coding process, from which 341 codes were developed, I undertook a review and comparison of the initial codes. This review served two purposes; firstly, it allowed me the opportunity to identify where I may have inadvertently duplicated a code resulting from a lack of recall of earlier codes due to their volume. Secondly, it allowed me to compare codes and the data they represent, giving me the confidence that they were accurately representing the data and enabling me to collapse them into other more accurate codes.

Charmaz spoke of the blurring of the delineation between the initial and focussed coding processes (Charmaz, 2014) which I experienced at this point in the coding process. At this time, I was able to identify some of my initial codes that aided my understanding of the meaning within other initial codes and their related data. As a result, I was able to merge some codes where on further analysis, their meaning became clearer, thus allowing me to recognise a greater degree of theoretical depth to the data. Table 4.6 provides an example of this process; when a group of codes is considered through a more focussed analytical lens, it became clear that all codes applied to the focussed code of “finding the right person for the job”.

Having reviewed the final list of initial codes, a substantial number of codes remained (202 codes). In her discussion of coding by novices, Holton (2007) noted that in their attempt to be as open as possible to the data, researchers new to grounded theory may generate too many codes of a descriptive rather than analytical nature. When reflecting on how to manage this, I focussed my attention on those codes that proved to be more aligned to my research question. It is important to note at this time that the design of my overarching research question was deliberately broad, to enable meaning to be constructed from the data rather than driven by an overly prescriptive question.

To that end the more fruitful codes were those that provided a rich source of data for further analysis and discussion.

Table 4.6. Example of merged codes during the focussed coding process.

Initial Codes	Focussed Code
Finding the right preceptor	Finding the right person for the job
Calling for applications	
Having the 'Right Stuff'	
Having a selection process	
Recognising some people shouldn't precept	
Evaluating preceptors performance	
recalling reluctance of others to do preceptor training	

For the most part during focussed coding, initial codes were analysed according to the depth of coverage they provided to the data, for example, their frequency of recurrence was used to reflect the consistency of that concept's emergence. However this was not always the case and as Charmaz has discussed the risk in graduate research, for students to focus only on those codes more frequently identified (Charmaz, 2014), and the need to also capture codes of less frequency that hold significance to the research question. In my research, for example, a low frequency code such as *"understanding the meaning of language"* became important for two reasons, firstly, due to the

significance that understanding language used in paramedicine, held for participants, and secondly its alignment with one of the underlying principles of Grounded Theory, Symbolic Interactionism which will be discussed in Section 4.4.1.

Focussed coding, and associated memoing allowed me to establish conceptual categories from the data. Conceptual categories consist of the grouping of codes to clarify the ideas or themes occurring in the data (Charmaz, 2014). In my study this allowed me to develop depth in the research question *“How do Paramedic preceptors view their readiness and preparedness to perform the preceptor role?”* through the grouping of focussed codes under five conceptual categories which then became the focal point for each of the results chapters reported later (chapters 5 to 9). These five conceptual categories are reflected below in Figure 4.2.

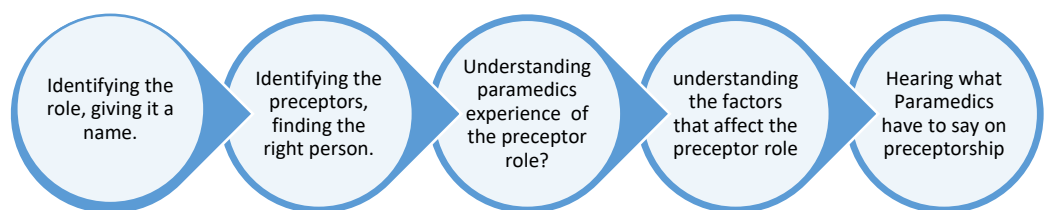


Figure 4.2. Analytical Categories and their progression throughout the research.

4.3.5 Limitations

As stated in Chapter 4, Section 4.3.2 it became necessary to vary the interview model due to participant access which impacted on the way in which the final three interviews were conducted. This resulted in the need to amend the model of interview for the final three interviews, and an amendment to the ethics approval for this study was submitted seeking approval for the inclusion of telephone interviews. Sturges and Hanrahan (2004) explored the impact of combining face-to-face interviews and

telephone interviews in a single qualitative study in an attempt to identify any impact the two models had on data quality and depth. These authors identified telephone interview as useful in accessing participants that are difficult to access and might otherwise not be able to participate in the study (Sturges & Hanrahan, 2004). This was particularly relevant in my study as the final three participants were all in remote regions in Tasmania, New South Wales and the final Tasmanian participant was on leave in remote Western Australia. Therefore the use of telephone in this study allowed me to gain broader perspectives from rural paramedics I would otherwise not have had the capacity to interview due to their isolation. Beyond the mode of communication, there was otherwise no difference in the conduct of the interview and resulting coding. No props were used in the interview, and coding did not include non-verbal elements that may have been present in face to face interview compared to telephone interview.

Sturges and Hanrahan (2004) found in their comparison of the two modes of interview that there was no difference in the volume, depth or quality of data. They did, however, identify that where a researcher might gain from the analysis of facial reactions or body language, telephone naturally had its downfalls (Sturges & Hanrahan, 2004). Data collection in my research did not make use of these factors, the only equivalent area that was coded was the confidence of the participant in defining the terms preceptor, mentor, clinical supervisor and clinical instructor. The confidence of the participants in their answer was readily identifiable through verbal cues such as intonation, hesitation and prolonged pauses. It is my belief that this change in interview model was not a true limitation but instead a strength as it allowed me to access the final participants that enabled theoretical saturation to occur.

As stated in Chapter 4, Section 4.3.3 the initial interviews were scheduled over a short intensive period with little more than hours between some interviews. This

necessitated the addition of the previously described preliminary coding process to enable compliance with grounded theory methodology. This approach in many ways strengthened the coding of data as initial coding based on notes and memos allowed me to follow the constructs of grounded theory and still return for a more detailed initial coding phase following the completion of initial interviews. The coding of notes and memos is supported in the grounded theory methodology and its proponents (Charmaz, 2014; Corbin & Strauss, 1990; Holton, 2007). In this research the key elements of grounded theory outlined in Section 3.2 were adhered to at all times, consistently across the handling of all data and analysis ensuring that the codes, categories and constructed theory were grounded within the data.

Despite the majority of paramedics entering the workforce now doing so from a tertiary education background, the study participants in this research were weighted towards the vocational entry pathway. Sampling methods that allow for participants to entirely control their decision to participate in a study or not are subject to a participant self-selection bias where this type of weighted sample can result (Lavrakas, 2008). Within grounded theory this bias is limited by the theoretical sensitivity of the researcher and their capacity to direct theoretical sampling as described in Chapter 3, Section 3.3.1 and 3.3.2. The limitation presented by this bias is however not entirely resolved in this study however as there were a limited number of tertiary qualified paramedics that expressed their interest in participating in the study.

This research was conducted as part of doctoral studies that spanned eight years. The data collection period in which interviews were conducted was between August 2013 and March 2015. It is possible that changes may have occurred within the profession during the elapsed time.

4.4 Theoretical perspectives

The following section outlines the two theoretical perspectives used as analytical lenses throughout the study. At the outset of this research I was interested in the degree to which paramedics were ready to fulfil the role expected of them when working with learners. To do so, it was necessary to explore just how well paramedics understood the role, what it was, what it entailed and therefore how to perform it. These types of questions align well to the concepts of symbolic interactionism (Blumer, 1986), which itself is one of the underpinning theoretical perspectives of grounded theory study. The second theoretical perspective underpinning the research, which became important to my understanding of the data during coding and analysis, is role theory which derives from symbolic interactionism (Stryker, 2001). These are discussed briefly in the following section.

4.4.1 Symbolic interactionism

The primary theoretical perspective underpinning grounded theory is symbolic interactionism. There are other theoretical perspectives that can be applied to the methodology, however, as Anselm Strauss was himself a theorist of symbolic interactionism, it played a significant role in the development of classical grounded theory (Reynolds, 1993). In discussing the link between symbolic interactionism and grounded theory, Charmaz described them as fitting together as one theory-methods package (Charmaz, 2014; Charmaz & Keller, 2016). Symbolic interactionism and grounded theory both seek to explore the interaction between meaning and action (Bryant & Charmaz, 2007) to gain understanding of what is happening in an area of study or behaviour. Furthermore, symbolic interactionism is a logical fit with constructivist grounded theory in that symbolic interactionism recognises people as being active participants in their world and through that participation are actively re-interpreting the meaning of their activities (Charmaz, 2014).

Symbolic interactionism focuses on language and symbols and what they mean to individuals, and how they then impact on the behaviour or action of individuals (Carter & Fuller, 2016). Originating from the works of George Herbert Mead in the 1930's the term symbolic interactionism was coined by Herbert Blumer as a methodological approach to study (Blumer, 1986; Carter & Fuller, 2016). The approach to Symbolic interactionism proposed by Blumer, commonly known as the Chicago School, proposes that we act based on the meaning things such as symbols and language have for us; that this meaning is derived from our interaction with others; and that we modify or interpret these meanings based on our own experiences (Carter & Fuller, 2016; Charmaz, 2014). The premise of the Chicago School of Symbolic Interactionism therefore provides a foundation for how I initially wanted to explore this research, in that I was seeking to explore the understanding paramedics had of their role, which logically must be derived through an understanding of the meaning the role had for them.

4.4.2 Role theory

Role theory emerged as a sociological concept in the 1930's, and is founded on the concept that people act in ways that are defined by their social identity and context (Biddle, 1986; Stryker, 2001). The original metaphor describing role theory has a theatrical premise in that people (actors) play roles in society and maintain functions within society, for which there are scripts or sets of expectations (Biddle, 1986; Stryker, 2001). Role theory has evolved over time, with variations in perspective including functional role theory, symbolic interactionist role theory, structural role theory, organisational role theory and cognitive role theory (Biddle, 1986). However consistency exists across these variations in the recognition that the primary focus of role theory is use of language, social behaviours, and their related roles and scripts. As Biddle (1986) states "Most versions of role theory presume that expectations are the

major generators of roles, that expectations are learned through experience, and that persons are aware of the expectations they hold” (p. 69).

The concept of role theory aligns well with a constructivist grounded theory approach and with symbolic interactionism as both symbolic interactionism and role theory presume that people are agents in their in their own social interactions (Biddle, 1986; Charmaz, 2014; Snow, 2001). It is a useful sociological perspective when analysing the work of paramedics with learners. Working with learners is a role expected of paramedics; ideally the script that they follow should comprise the expectations understood by each actor in association with this role. There are multiple actors in this scenario, including the paramedic, the learner, the ambulance service and the education provider.

4.5 How findings are represented throughout the thesis

Throughout this thesis findings will be reported through the use of quotes that represent the weight of evidence demonstrated in the data. The quotes used will be used on the basis of pivotal quotes that represent a preponderance of evidence rather than providing frequent similar quotes these quotes are therefore representative of the data and as such can be used to support the construction of theory in Chapter Ten.

Findings chapters 5 to 8 will be divided into two sections, the first presenting the evidence and initial analysis of the data, followed by the second section in which the data is analysed with relation to published evidence. This is intended to allow initial analysis to be inductive and reflexive where required prior to introducing broader evidence. At the completion of each chapter, in the chapter summary, the actor analogy will be used where relevant to show the alignment of the findings of my research to the principles of role theory.

4.6 Chapter summary

This chapter has outlined the manner in which the constructivist approach to grounded theory was applied throughout this research, representing the sampling method, use of interviews for data collection, use of memos, the conduct of coding and analysis. The use of symbolic interactionism and role theory and the actor analogy as lenses for the analysis of the data was introduced. Chapter 5 will begin the description and analysis of the data, as the first of five findings chapters.

Chapter Five – The role of language

5.1 Introduction

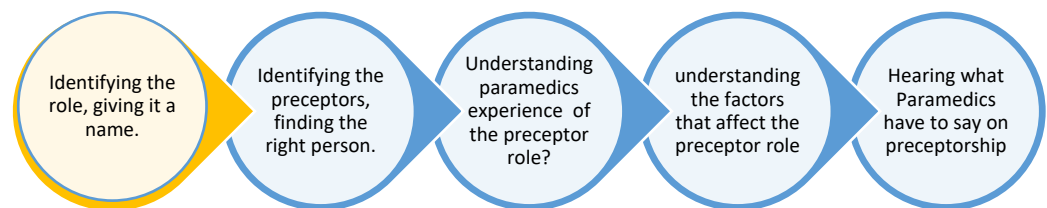


Figure 5.1. Analysis stage 1 – Identifying the role; giving it a name

This chapter presents an analysis of the language used to describe the paramedic working with learners, focusing on their role and associated functions. This chapter, like each of the subsequent results and discussion chapters, is divided into two parts. Section 5.2 reflects the responses provided by participants when asked to give an outline of their understanding of the four terms used in paramedicine: Clinical Instructor, Supervisor, Preceptor, Mentor and Clinical Educator. Section 5.3 then extends the analysis of participant responses through the lenses of symbolic interactionism and role theory, making use of literature to explore the topic beyond paramedicine. It is important to remember that this thesis is designed to take the reader through the key findings categories across five chapters. These results chapters present an analysis of the data with commentary on associated evidence or gaps in evidence. In this way, a properly formed theoretical perspective will be constructed from the data in line with a constructivist grounded theory approach (Charmaz, 2014).

5.2 Defining the terms

As a theoretical perspective, symbolic interactionism has provided valuable insight into the way in which paramedics understand their role when working with students. The role of language as a symbol for communicating meaning is entwined with how we act in society (Blumer, 1986) and as such how we understand a given language from within paramedicine will have a clear impact on our actions. At the outset of this research, one of the key questions I wanted to explore surrounded the use of language to reflect roles, and what paramedics understood the words they used to mean. As explained in Section 4.4.1 the meaning derived from language has a substantial impact on how people understand concepts and how roles are performed. Therefore if applying a symbolic interactionist perspective (Carlson, 2013), an understanding of the language used in the paramedic profession and how it is understood aids in the development of an understanding of how the role of working with learners is perceived. As discussed in Section 2.5, there are a wide range of terms used within the paramedic profession for the function associated with working with learners, including Clinical Instructor, Supervisor, Preceptor, Mentor and Clinical Educator (O'Meara et al., 2015). At the time this research began, this variation was further affected by the national agenda driven by the HWA to include Clinical Supervisor as a default term across all health professions (Health Workforce Australia, 2010). Therefore, to explore the impact of meaning associated with these terms in paramedicine I have selected the terms more commonly used in the profession, ambulance services and education providers in the two states investigated. These are Preceptor, Mentor and Clinical Instructor with clinical supervisor added to accommodate the drive from HWA.

The findings presented here in Section 5.2 emerged from one question asked during the interview: *What is your understanding of the term [and then each of Preceptor, Mentor,*

Clinical Instructor and Clinical Supervisor asked separately]. Participants tended to answer the question in terms of their understanding of the term, as well as the functions that they associated with that term. A detailed analysis of participants' responses in relation to symbolic interactionism and role theory is provided Section 5.3.

5.2.1 Mentor

The term mentor is defined in mainstream dictionaries as being a friend, a person that provides help and advice, someone that may be associated with but not limited to the school or the workplace (*Mentor definition and meaning | Cambridge Dictionary, 2018; Mentor definition and meaning | Collins English Dictionary, 2018*). Definitions of a number of the mainstream uses of the term mentor are provided in Table 5.1.

Table 5.1. Definition of a Mentor

Source	Definition
Collins English Dictionary.	"A person's mentor is someone who gives them help and advice over a period of time, especially help and advice related to their job."
	"a wise or trusted adviser or guide"
	"a wise, loyal advisor"
	"a teacher or coach" (<i>Mentor definition and meaning Collins English Dictionary, 2018</i>)
Cambridge Dictionary	"a person who gives a younger or less experienced person help and advice over a period of time, especially at work or school" (<i>Mentor definition and meaning Cambridge Dictionary, 2018</i>)

A high degree of variation in the interpretation of the term mentor was evident amongst participants in this study, varying from those who saw the mentor as a supportive peer through to those who saw the mentor as a senior member of the establishment who has a teaching role. For example, to some participants a mentor was a peer that you could turn to when advice or support is needed following challenging clinical experiences, as Terry explained:

A mentor doesn't in my view... have to be the person you're working with for the next 4 weeks. Because I have mentors in my life that I go to with questions and I think that's more the mentoring role. You can come to me at any time with any question and I'll help you as best I can but I don't have to work with you [on shift] to get you there. But if you have a bad... [shift] and you catch up with me on the next block and you just want to sit down and talk about it, well then I'm here for that. (Terry)

Other participants reinforced Terry's implication that mentors are more of a personal choice, rather than someone allocated as part of a workplace role. Darren's comment encapsulated the concepts emerging within the data:

...I see a mentor still as a very personal thing and a professional one is someone who you actually respect enough to ask them to be a mentor, or... you don't need to ask them but see their behaviour and model it. (Darren)

The data further supports this perception of a mentor being someone chosen by the individual, where the term mentor is linked with the function of a guide, or someone who aids in workplace socialisation. Participants referred to mentors being a guide in a

range of contexts; guide to new staff members; guide to professional practice; guide while navigating the pitfalls of the profession; guide to learning, as Julie explained:

Well, a mentor, for me, is someone who is a guide... and, that's a guide to many things, from professional practice to their journey to learning.
(Julie)

Mentors were commonly referred to as fulfilling an informal function not associated with day-to-day clinical practice, instead relating to both work and personal or professional matters. This informal function was suggested by Brian's reference to mentors being role models and having a peer support role:

[A]... mentor is really along the lines of somebody that provides a role model and more of a peer supporter as they [the learner] progress through their period of time in a workplace. (Brian)

Mentors were described as often being chosen by the individual based on criteria such as experience, respect and perceived quality of practice. This informal view of the term mentor is contrary to a common use of the term in the profession, where it is used to refer to the paramedic who is appointed to work with learners in a formal capacity. Darren outlined the decision making process he follows when identifying a mentor:

...my feeling about that word [mentor] is that it's a personal choice so I as a student will make a personal choice 'I like how, you know, this person operates. I'll start to ask him about cases and jobs and, you know, how to do this and all of that sort of thing' (Darren)

Four participants referred to mentors as specifically having a teaching role, and of these one referred to teaching as an informal role, highlighting the fact that teaching is not perceived as key part of the role of the mentor.

In answering the question described in Section 5.2 above regarding their understanding of the four terms, a number of participants could not separate the term mentor from preceptor; Richard's comments below highlight the variation that exists in the industry associated with these terms:

So, precepting is about mentoring, is about being encouraging, is about being connected with people. It's about guiding and being that coach -- facilitator. It's all those things. Similar to a mentor (Richard)

5.2.2 Preceptor

While the term mentor appeared to be viewed as a personal and informal role, the term preceptor was seen by some participants to be more of a short-term role, and in some ways a role that requires a more formal relationship than that of mentor, as Lisa described:

...a preceptor I think is someone that gets rostered well not even rostered someone that works around you. And it's supposed to be a short-term- as far as I was aware- a short-term relationship. (Lisa)

The majority of participants linked the term preceptor to a teaching or training role, as Roger stated; a preceptor is “someone who has been allocated a teaching role to other staff members”. Conversely, some participants considered the preceptor role to be responsible for the facilitation of the learning experience, where the learner consolidates concepts learned in the class setting and to guide the learning process, rather than to teach. This brings into question participants' understanding of what it means to teach, as the concept of teaching would normally incorporate facilitation as a strategy (Hogan, 2005). For example, Terry specifically stated that a preceptor is not there to teach as students should have already acquired many of the knowledge and skills required:

To me a preceptor is someone who provides the environment for the person who is learning, so almost like a facilitation... a student comes to me, I'm not really teaching them a whole lot, they should have already been taught a whole lot. I'm providing them with an environment in which they can just go out and practice what they've been taught. I'm there as a safety net, I'm there to catch, maybe to comment, maybe to guide, not to teach. (Terry)

Others supported the facilitator perception of the preceptor role, suggesting that a preceptor is a guide in the journey of students during clinical placement, in a similar manner to that outlined previously for the mentor. Simon explained that while the paramedic oversees the student, they are there to allow the student the room to learn:

Preceptors, are there to help the student to be the student, to learn, to oversee what's going on and answer questions about stuff, to have the student doing their job and overseeing them to make sure they are doing it right. Not jumping in unless needed. Helping the student do some reflective practice. And to basically work with that person to improve their own clinical ability in an ambulance context. (Simon)

While for Darren the functions of teaching and providing the student with room to move and learn, are not mutually exclusive:

I believe a preceptor is somebody who allows a student to develop in their practice. So it's partially a teaching role, it's partially sort of an encouragement or nurturing role, I suppose the end point is that the student has to be allowed to teach themselves enough to change and... develop. So I see it as a facilitator. (Darren)

An emerging perspective within the data was that paramedic preceptors are considered the 'Jack of all trades' of clinical learning. They were referred to by a number of participants as having the functions of each of the terms asked in this question, wrapped up together in one. The term preceptor, therefore, was considered an overarching term that encompasses all of the roles included in the other terms, mentor, instructor and supervisor, all in one, albeit in an appointed capacity for a focused period of time, as Julie and Darren summarised:

In reality, a preceptor has to be all of those things. They have to be a mentor. They have to clinically instruct. They have to clinically supervise. (Julie)

For an organisation the focus is going to be on the clinical practice but the preceptor role itself is about the scene, it's about body language, it's about how to feel confident, it's about how to impart a presence... sometimes... it is about having a shoulder to cry on, like a target for frustration. So yes I think the preceptor role on paper is about the clinical experience but I think that the role of the preceptor is more than just clinical. (Darren)

Whilst the term preceptor was perceived in a variety of ways, what was surprising in the responses was the lack of knowledge of the meaning of the word. Preceptor is used by a number of universities providing students to both states for clinical placement, and is also used within the Tasmanian ambulance service. However, despite this some participants were unable to provide any insight into the term or associated function, either never having heard of preceptor or thought about it:

Preceptor, I've never even come across that word (Chris)

To be honest, I've never really thought about what preceptor means. I use the term because we use it in my workplace. To be honest, I've never really thought about what it means (Julie)

I've never heard of preceptor until the University started using it... I've never really known what it meant (Tony)

In summary, as is the case for the term mentor, the term preceptor was subject to a wide variety of interpretation by some participants or complete ignorance of the term by others. For those who were able to provide their impression of its meaning, their understandings ranged from referring to preceptor as being the same as mentor; to it having a more structured teaching function; or as a term that encapsulates a role that incorporates mentorship, instruction and supervision.

5.2.3 Clinical instructor

The term clinical instructor was viewed as a role that holds a considerable amount of formality and authority, more so than mentor or preceptor, as Lisa explained:

the... description of clinical instructor gives it more authority than just a preceptor. I've been told quite clearly that I'm not a clinical instructor. (Lisa)

Additionally the term clinical instructor was viewed as having a function that was more removed from the learner, and not necessarily working with learners in a clinical setting but rather a classroom setting in an ambulance service education centre. For example Richard and Simon suggested:

You are guiding and teaching certain things as an instructor rather than helping them find things themselves, learning things themselves,

discover their own knowledge, confirm their own knowledge and explore growth in their knowledge in themselves. (Richard)

Clinical instructor... has a procedure that is going to be taught. They teach that procedure in a classroom setting. They teach it and assess it to make sure you can do it and they send you out to the field.
(Simon)

Overall the term clinical instructor was viewed as one that is less frequently used now, one which defines a more formal position, is more education focussed and specific to the delivery of clinical education, rather than the development of paramedics, as William summarised:

Clinical instructor is typically more focussed on the education of the student from the clinical perspective, so the process, the procedures, the drug therapies and has less of an input or an interest in the emotional development of the student... or the overall paramedic development (William)

5.2.4 Clinical supervisor

Recognising the interests of the HWA identified at the outset of this research, in applying the term clinical supervisor to all clinical disciplines nationally, the term was explored with participants, even though it is not widely used in paramedicine. Overall, participants were not familiar with the term with many finding themselves constructing meaning in the absence of prior exposure to the term. However in line with the points raised in the community consultations held by HWA (Health Workforce Australia, 2011), the term clinical supervisor was perceived as more of a managerial and formal role as opposed to an educational role, as Lisa explained:

...we're still calling our managers supervisors. So it gives you that step in management, in my head. It's just the association of the two terms. They're not your "team manager," they're your supervisor. (Lisa)

William also described the term as having a degree of an enforcement connotation to it:

...its more in regards to supervision of your practice in general in a clinical environment... are the correct procedures being followed, are the correct drugs being given, are the patients being treated in an appropriate manner, are there any issues that have come to light in the clinical management of patients that need to be investigated, that sort of thing so it's more a policeman type role (William).

The term clinical supervisor was also viewed as synonymous with clinical quality, whether on a case by case basis or for an operational team. Even in the responses in which it was identified as a managerial term, the framework of the responses included reference to quality of service or service delivery audit, as Tanya's comments exemplified:

I guess to me that sounds like someone who would keep an eye on what you're doing and we would give the appropriate treatment and we stay within our guidelines and that sort of thing. Perhaps somebody you would consult with if you had a bit of a strange job that you weren't sure about, or something like that. Again it makes me think of someone who is not on road, probably in an office but experienced and knowledgeable enough to have an overview of what everybody else is doing and keep things where they should be, keep people in line and make sure we stick to our CPG's and do the right

things by the patients and audit the cases and that sort of thing.

(Tanya)

In summary, while there has been a national agenda to introduce the term clinical supervisor across all health professions, it is not a commonly used term in paramedicine. It was generally perceived as describing an authoritative, oversight role with functions that are aligned to compliance and quality assurance, rather than education and development.

5.2.5 Interchangeable terms or role confusion?

Interchangeability of the terms was a common theme, particularly with regard to the terms mentor and preceptor. For example when asked for a definition of what the term **mentor** meant to her, Tanya offered the following response, using the term **preceptor** instead:

To me a preceptor is someone who has more knowledge and experience and is working with someone at a lower level than them to try and impart their knowledge and experience on them and help them to be a better paramedic... (Tanya)

Of note in Tanya's response above is her substitution of the term mentor in the question with preceptor in her answer. When then asked for the definition of the term mentor Tanya indicated they were the same thing:

I've used both words throughout this. I don't know why, to me it's the same thing. (Tanya)

Richard reinforced this interchangeable nature of the terms preceptor and mentor when he indicated there was cross over between the terms:

There's aspects of what each of those people do that cross over. So, precepting is about mentoring, is about being encouraging, is about being connected with people. It's about guiding and being that coach... facilitator. It's all those things. Similar to a mentor, you know?... I think in my understanding, the word preceptor and mentor are very close. There's not a lot of difference in functionality that I see between the two (Richard)

The variation in understanding of the terms and their associated roles was also reflected in how participants interpreted the application of the role. Richard suggested that there is no need to be physically present with the learner during their placement or learning experience:

The mentor and the preceptor both can be from a distance. You don't have to be right beside the person the whole time. (Richard)

On analysing the responses in the data on the perceived interchangeability of terms, and the inter-relationship between the terms I found myself wondering how much of this is truly a belief that the terms all have similar meanings, and how much of it is a by-product of a lack of clear defining criteria for the terms and the roles they relate to in the paramedic profession. Are the paramedics simply ignorant of the function they are expected to perform and as such cannot properly define it? These questions influenced data analysis in Section 7.2.2 in which data relating to training and preparation of paramedics working with learners is analysed.

Role confusion appears to be an emerging property evident in the data with people describing a function for each role then contradicting themselves when speaking of the next role they were asked about. This confusion is typified in Roger's response as he attempted to provide meaning to the terms mentor and preceptor:

Mentoring happens and precepting happens frequently, pre-case, during the case and after the case on a particular event... a preceptor is someone who has been allocated a teaching role to other staff members to fulfil certain teaching requirements... they have a series of tasks to perform in a teaching and learning capacity in order to achieve a desired outcome at the end of the day... mentor could be used interchangeably with preceptor... I would see it [mentor] being a more broadly encompassing role. That is somebody who almost takes somebody under their wing... somebody who uses their knowledge, skills and experience in a more general way to help somebody do that role better, the ambulance role... it might be in informal ways... a preceptor might assess somebody against particular criteria and find them, I wouldn't say failing, but find them needing more work in order to meet the standards and report that... a mentor is not going to find people wanting, what they're going to do is help encourage people to, you know, find their potential in that encouraging positive motivating sort of way...they're not being assessed, they're being coached, helped, assisted and guided towards doing the role better. (Roger)

Roger's points above are based on his answers to how he would define the terms preceptor and mentor and whilst he begins by describing the two terms as being interchangeable, he then goes on to state specific aspects that are contradictory, in effect bouncing from one term and its meaning and the next. As Roger suggested, the preceptor role is a more formal role, with specific teaching requirements, whereas he explicitly described mentoring as more informal, bringing into question on this basis alone their interchangeability. To him, precepting has a teaching function whereas mentoring is more encompassing of a range of attributes beyond teaching, which

includes *taking somebody under their wing*. And finally, while Roger felt that preceptors act as assessors, identifying learners that have not achieved standards, conversely he thought that mentors would not take on an assessor role. Each of these contradictions are evident in Roger's response when describing the two terms that he sees as interchangeable. This response typifies the sentiment evident in the data and raises a question about the impact of the lack of clarity and/or understanding of the language used in paramedicine on the performance of the role.

This section has provided an analysis of the participants' responses to the terms mentor, preceptor, clinical instructor and clinical supervisor. The two latter terms (clinical instructor and clinical supervisor) were seen as formal roles not directly associated with the day-to-day work of the paramedic working with a learner in a clinical setting. The terms mentor and preceptor were both perceived as related to the role paramedics fulfil when working with learners. While there was considerable variation in the understanding reflected by participants on the meaning of both of these terms, the term mentor was generally viewed as less formal and associated with personal choice, whereas the term preceptor was viewed as a formal role allocated to a paramedic when working with a learner for a defined period of time. The term preceptor was viewed as encapsulating elements of each of the other terms, as a 'jack of all trades'. Both terms were subject to a lack of definition and clarity with the terms being used interchangeably despite differing descriptions being given for them.

5.3 Discussion – The meaning of language and impact of role theory.

Section 5.2 summarised participants' understandings of common terms used to describe the role performed by paramedics when they are working with learners.

Section 5.3 further explores these findings, linking them with established knowledge where it exists as well as highlighting any new knowledge that is beginning to evolve.

5.3.1 Deriving meaning through the use of symbols.

As discussed in Section 2.5, HWA attempted, unsuccessfully, to generalise the concept and nomenclature "*Clinical Supervisor*" across all health disciplines in Australia (Health Workforce Australia, 2010, 2011). In retrospect, the commitment to common nomenclature may have been optimistic given their intention to achieve this across all clinical health professions and associated professional cultures. As discussed in Section 4.4.1, the theory of symbolic interactionism proposes that how we interpret language and establish its meaning is impacted by our experiences and our culture (Carlson, 2013). This can be extended to subcultures including professional cultures such as distinct health professions.

According to symbolic interactionism, people interact and communicate with each other using symbols (including language) which are developed as a result of their life experiences. The symbols we use are affected by our subjective experiences as individuals in society and sub-parts of society (Stryker & Vryan, 2006) which, in the context of my research, would include the professional cultures in which paramedics function. Whilst there has been limited exploration of culture as a concept in ambulance services and paramedicine, researchers in the UK have begun to describe ambulance service culture and sub-cultures (Wankhade, 2012; Wankhade, Radcliffe, & Heath, 2015). Organisational cultures, and therefore arguably professional cultures, viewed through the lens of symbolic interactionism (Morrill, 2008), have been described as systems of meaning. On this basis, we interpret symbols such as the terms preceptor, mentor, clinical instructor or clinical supervisor based on our experiences of society as a whole, but also based on our experiences in our professional culture.

Therefore, it is apparent that the meaning derived from these terms will change to some degree depending on the experiences of the person or persons deriving meaning from them. The meaning of a term such as mentor, for example, would be broadly determined by a person's experience of the term in society generally; as well its variations of meaning as used by sub-groups in society, such as in paramedicine compared to other health disciplines such as medicine or nursing. I contend, therefore, that generalised meanings derived from wider society or from other professional cultures cannot fully meet the requirements of paramedicine, which holds its own professional culture.

When discussing their understanding of the term mentor, the participants used descriptions derived from their wider social exposure and experiences. This is evident in the way they commonly referred to a mentor as a personal relationship more than as a formally appointed position responsible for supporting learning. This informal and personalised nature of the role they described is at odds with the widespread use of the term mentor in the paramedic profession and cognate literature to describe a person appointed to work with learners (see Brown et al., 2011; O'Brien et al., 2014; O'Meara, Williams, et al., 2014; Sibson & Mursell, 2010b; The Council of Ambulance Authorities, 2010). Whilst my study participants used the term mentor frequently throughout their interviews, the way they described its meaning does not align with a formalised role. This is unsurprising given the lack of formal structures in place within the profession for mentoring or for any other form of support for learners. In an Australian study of paramedics' understanding of mentoring in paramedicine, it was found that paramedic academics had some difficulty providing a definition for the term mentor (Furness & Pascal, 2013). This Victorian study suggested that the term was used by default to refer to clinical instruction or supervision rather than for mentoring. A limitation to this study is that the authors do not discuss the link between the paramedic academics'

understanding of the term, and the understanding of practicing paramedics. Whether the authors intended to argue that as members of the profession, the beliefs for both groups will therefore be the same, remains unclear.

The lack of clarity in terminology used and the associated impact of that lack of clarity on the desired role is not limited to the Australian context. In the UK context Peiser, Ambrose, Burke, and Davenport (2018) highlight the variety of terms used in the literature to describe what they call a mentor in the NHS, suggesting this variety is the cause for role confusion.

Stryker and Vryan (2006) defined the symbols we use to give meaning, as constructs that are subject to continual change, due to the fact that society and its parts are not static and continually evolve as people interact. In the context of my research, this concept brings to the fore an interesting question about the variation in terms used and how they are understood by practicing paramedics. With the change in models of education across paramedicine, from the previous vocational model of education to the tertiary model we have now, how has the language used changed? The relevance of this question is highlighted in the data wherein some participants reported that they had not heard the term preceptor until their ambulance service or a university began to use it (see statements by Chris, Julie and Tony in Section 5.1.2).

During the 1980's and 1990's the nursing profession underwent a similar change in their education model, to that experienced in paramedicine, moving from a vocationally based model to a tertiary education model (Lusk, Russell, Rodgers, & Wilson-Barnett, 2001). Preceptorship was a term that emerged in nursing at that time (Richards & Bowles, 2012; Shamian & Inhaber, 1985), when preceptors were seen as important contributors to the change process as they were able to address the growth in knowledge provided at a tertiary level, and the subsequent reduction in clinical practice

experience opportunities for learners in the new educational model (Yonge, Myrick, Billay, & Luhanga, 2007).

The interchangeable manner in which mentor and preceptor are used by participants in this research is not unique to this study, or to paramedicine as a discipline. The interchangeability in these two terms has been described in other professions such as nursing (Carlson, 2013; Yonge et al., 2007). Burnard (1990) proposed that in the absence of a common understanding of the terms mentor and preceptor in nursing, there is no assurance that the nurses were speaking about the same function. This aligns with my findings which indicate that when participants use the terms mentor and preceptor interchangeably, they become unclear about the meaning and associated functions they are describing (see Roger's answers referred to in Section 5.1.5).

When considering the use of terms across cultural or sub-cultural boundaries, the potential for the meaning given to terms to be different must be recognised. This is true of national boundaries, between states and territories for example, and arguably true of professional boundaries where people experience society or their professional society in different ways. Yonge et al. (2007) discussed the confusion and/or grey area evident in the nursing literature, where terms are represented differently, including when comparing terminology in use in the UK and the USA. The confusion related to terms such as mentor and preceptor, but also including a wider range of similar yet different terms, such as coach, clinical supervisor, educational supervisor and remedial supervisor used in medicine (Clark et al., 2006), has been the subject of debate in the literature, with several authors publishing commentary on the challenges of meaning in these terms (Clark et al., 2006; Garvey, 2004; Mellon & Murdoch-Eaton, 2015). This literature and my own data suggests the need for some degree of caution when exploring the meaning of symbols across such boundaries.

5.3.2 Perceptions of self and impact on professional identity.

Throughout the last decade there has been recurring discussion of professionalisation in paramedicine, and the extent to which paramedicine can be considered a profession. If paramedicine is not a profession, what does it need in order to achieve professional status, and how does being recognised as such impact on the professional identity of paramedics? (First, Tomlins, & Swinburn, 2012; Joyce et al., 2009; O'Meara, 2011; van der Gaag & Donaghy, 2013; Williams, Onsmann, & Brown, 2009, 2010b; Woollard, 2009). O'Meara (2011) surmised that the lack of reflective literature in paramedicine or the lack of research into the profession, is a weakness of the profession. Scholars in paramedic education could be accused of a similar weakness as there is also a dearth of reflective literature underpinning this important area of paramedicine. As previously discussed (see Chapter 2, Section 2.4), the majority of literature in the field of paramedic education has focussed on the experiences of the learner (cf. Boyle et al., 2008; Lucas et al., 2013; Wray & McCall, 2009), with little research investigating the perspectives of the paramedic working with the learner. The resulting gap in literature provides a challenge for this sub-group in the profession, paramedics working with learners, in gaining a clear understanding of their professional identity.

Professional identity is defined by Neary (2014) as “the concept which describes how we perceive ourselves within our occupational context and how we communicate this to others” (p. 14). In the context of paramedics working with learners there is a degree of complexity to professional identity as they have multiple roles. Aside from the dichotomy of the paramedic role and the role of working with learners, participants in this study indicated their role in working with learners was multifactorial, as discussed throughout this chapter. Neary (2014), in a study of career advisors in the UK, found that the multidisciplinary nature of their role caused a diversity in defining their identity, and that clarity of job title was linked to a stronger sense of professional

identity. It is unsurprising therefore that the participants in my study lacked clarity in their language and capacity to describe their role. This apparent difficulty in defining their role supports my initial motivation for undertaking this study as, from a symbolic interactionist perspective, an inability to describe their own role suggests the paramedics working with learners do not have sufficient knowledge of their role.

The concepts of self and identity are core to the principles of symbolic interactionism (Blumer, 1986) with the concept of self, evolving in part through our interactions with others (Carlson, 2013). The term 'others' can be thought of as both significant others and generalised others. In a professional context, 'significant others' are those people we hold in high regard and view as role models, possibly encompassing mentors.

'Generalised others', on the other hand, are members of the various groups to which we belong, with our professional groups providing one such example (Carlson, 2013). In the context of my research, generalised others can be understood as potentially two distinct groups: the paramedics working in the profession as a whole, and paramedics who work with learners in the clinical setting. The shared experiences, use of symbols (including language) and resulting shared meanings of generalised others, will have an impact on the way in which we interact in our professional lives and how we function in our roles (Carlson, 2013).

Considering the lack of discourse on the role of paramedics working with learners, the diversity in terminology used, the lack of clarity surrounding the terms and the associated expectations, it is unsurprising that confusion exists. In discussing role identity, Sluss, van Dick, and Thompson (2011) discuss role theory as a merging of structural functions (behavioural expectations and function) and symbolic interactionism. In the absence of a shared meaning, and a lack of clarity in the

functions and expectations of the role performed by paramedics working with learners, it is unsurprising that there is a lack of clarity in their role and associated identity.

5.3.3 Role making, role taking and role insufficiency.

To this point throughout Section 5.3, I have outlined the extent of the lack of clarity in the role paramedics perform, when they describe what it is they do when working with learners. The lack of precision in the language used in discussing their role when working with learners, presents a challenge for the resulting behavioural expectations of this role. Returning to the analogy of an actor, roles are described as the social position of an actor in a given society or culture. To extend this position, an actor performs a role derived from their interactions with others, and how the actor perceives the expectations of others (Meleis, 1975).

The actor develops their conception of the role they fulfil based on the expectations and behaviours of others as relayed through language and action (Harnisch, 2011).

Figure 5.2 reflects the cyclic process paramedics should experience as they develop their concept of the role they fulfil. As detailed throughout this chapter, the language used to both define and articulate the role paramedics perform when working with learners is inconsistent. Furthermore, what paramedics describe as the functions of their role, or their own expectations of it vary considerably. As reflected in Figure 5.2, the interaction between language and expectations is bidirectional. In the case of paramedics working with learners, the inconsistency in language and therefore their conception of the role, feeds into their performance in that role, which in turn influences their and others' expectations of that role. For one to take on a role and perform it effectively, the role needs clarity in its associated expectations which are defined by a suitable term, and this is not the case in the current paramedic setting.

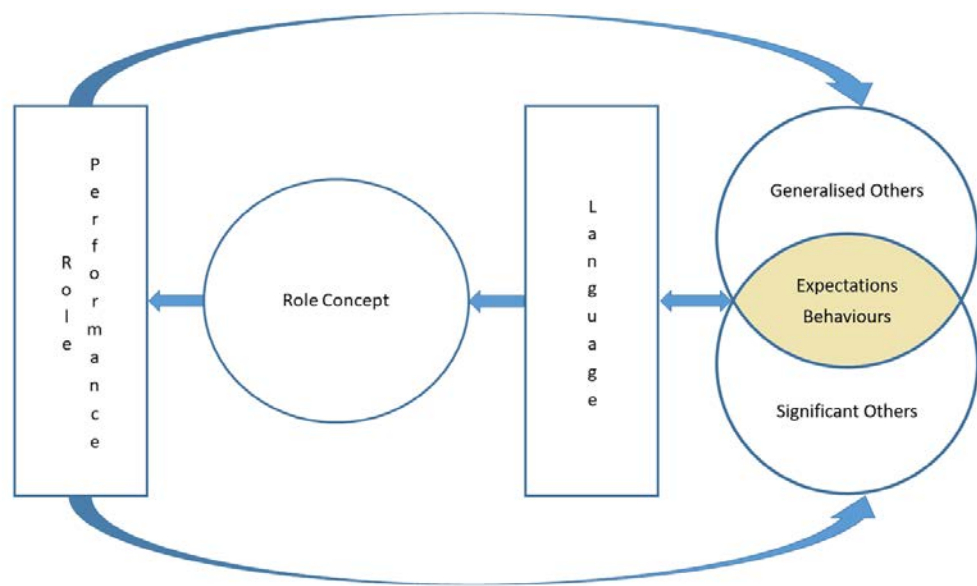


Figure 5.2. Role Theory Cycle (Copyright Dale Edwards 2018)

With any given role there are counter roles and complementary roles (Harnisch, 2011; Meleis, 1975; Stryker, 2001), counter roles being hierarchical and complementary roles being supportive or collegial. In the context of paramedics working with learners, these would include roles such as the learner (counter role) or other educational roles such as university lecturer (complementary role). Supervisory roles within an ambulance service may be a counter role as supervisor of the paramedic, or complementary role, working with the paramedic in supporting the learner. Each of these counter and complementary roles are significant others in the context of Figure 5.2 and bring with them their own set of expectations of the paramedic educator. For the paramedic to perform their role in working with learners, the expectations of each of the counter and complementary roles need to be explicit. Chapters seven and nine will expand further on this with regard to the communication of these expectations.

This section has described the problem evident within the data pertaining to language used and the possible resultant impact on role performance. Role theory, as discussed above, is heavily influenced by the expectations of others (employers, education

providers, learners and other paramedics). Figure 5.2 is a cycle in that role performance by an actor needs to be validated by the expectations of others (Meleis, 1975). Where there is a lack of clearly defined roles and lack of established expectations and norms, problems associated with role enactment occur. Meleis (1975) defined this as a state of “role insufficiency” (p. 264). The cycle in this case is disrupted early in the process, as expectations and related language are not clearly articulated to or by the paramedic to inform their performance of their role in working with learners.

5.3.4 An emerging theory of preceptorship in paramedicine

“Symbolic Interaction involves interpretation, or ascertaining the meaning of the actions or remarks of the other person, and definition, or conveying indications to another person as to how he is to act.” (Blumer, 1986, p. 66)

Throughout Section 5.3 I have discussed the findings of this study regarding the language used to describe the role paramedics take when working with learners, aligning with Blumer’s definition of symbolic interaction (above). It is clear from the data in this study that the term mentor is unsuited for this role as it is not aligned with how the role is undertaken in the profession. Mentors, in a traditional context, as viewed by the participants in this study are not formally appointed; rather they are personally selected and are not focussed on the goals of a specific educational experience for a learner. Limited as it was, participants’ descriptions of their understanding of the term preceptor, is more related to the role they actually perform with learners. Participants recognised that a preceptor is a jack of all trades, covering elements of the various terms supplied to them, these being Mentor, Clinical Instructor

and Clinical Supervisor, and best represents the actuality of their practice in the clinical setting. As such, from this point on throughout this thesis, I will use the term preceptor to reflect the role of a paramedic working with a learner, regardless of learner type or level. In this final section of Chapter 5 I will analyse these findings in relation to the literature and demonstrate how this informs an emerging theory of preceptorship in the paramedic profession.

Despite having argued that mentor is not the right term to describe the role paramedics take on when working with learners, there are still elements of the mentor function incorporated in the findings of this study. As stated, from their experience participants reflected a jack of all trades view of the paramedic preceptor role. Studies that comment upon the diversity of roles undertaken in a health professional setting such as mentor, preceptor and clinical supervisor, are typically in health professions and work environments that are quite disparate from the paramedicine work environment, such as nursing, medicine and midwifery (Bray & Nettleton, 2007; Mills, Francis, & Bonner, 2005). In discussing the paramedic process, Carter and Thompson (2015) highlight the challenges in transferring evidence from other health disciplines; this can also be said of translating educational evidence from disciplines in which the working environment, and therefore the clinical learning environment is substantially different. In the statutory ambulance service setting, paramedics primarily work as two-person crews, or in cases where a learner is on placement from an external agency such as a university, as three-person crews. This working environment necessitates the paramedic preceptor taking on multiple roles such as supervision and support in addition to training and development roles. This creates a point of difference between paramedicine and other health professions working in larger teams, where a health professional might have a mentor, preceptor and supervisor, all as different people.

Preceptorship has been described, in nursing, as a structured period of education during which a learner is placed with a qualified professional (Mills et al., 2005).

Preceptorship, unlike mentoring, is a formalised relationship for a defined period during which the learner has set goals to achieve. This aligns with the findings of this research in which participants reinforced the short-term nature of preceptorship. Participants in this study reflected the functions of preceptorship as being a mentor, role model, guide teacher, assessor, and being a supervisor. This supports the multifactorial approach to paramedic preceptorship identified by Carver (2016) who undertook a hermeneutic study of “being a preceptor to novice paramedics in their first year of practice” (p. 78). From his findings, Carver articulated a multidimensional role for paramedic preceptors comprising coach, role model, protector and socialiser. My research supports these functions within preceptorship and extends these findings by reflecting a similar multifactorial role that still incorporates a teaching and assessment function not evident in Carver’s findings.

Each of the functions outlined above inform a preceptorship capability that paramedics need to develop, and be aware of, in order to successfully perform their role when working with learners. Returning therefore to the concept of the actor analogy, this is in effect setting the scene and outlining the plot in which the role is to be played as well as scripting the role in terms of giving it an explicit name. The clear articulation of the role, through the use of consistent and accurate nomenclature, enables the process of structuring a role performance based theory of paramedic preceptorship to begin.

5.4 Chapter summary

The findings from my research outlined in this chapter indicate a lack of shared language and therefore a reduced capacity to describe what it is that paramedics do when working with learners in clinical practice. In the absence of clear expectations of

the preceptor role through a well-defined and shared language used to communicate those expectations, performance in this role is subject to inadequacy, and/or role insufficiency (Meleis, 1975). This chapter has demonstrated the variability in understanding, and therefore potential variability in performance of the preceptor role in the field of paramedicine. It has also been demonstrated that the unique working environment and organisational culture of paramedicine results in a need to define the preceptor role for their professional context rather than attempt to translate role terminology from other health disciplines. I have demonstrated the multifactorial functions that make up the paramedic preceptor role when working with learners, and demonstrated the utility of the term preceptor to describe those functions. Having established the nature of the role, and the language used to define and describe it, the next chapter will explore the challenges in selecting paramedics to act as preceptors.

Chapter Six – Recruitment and selection

6.1 Introduction

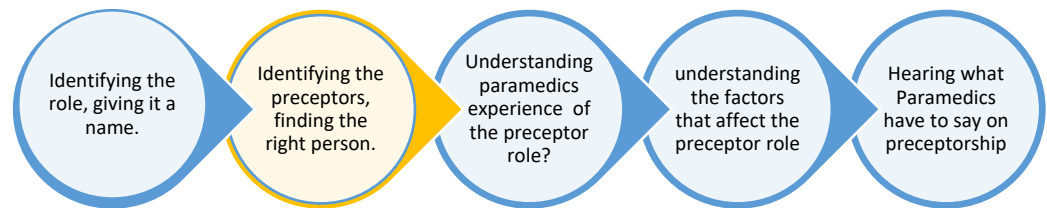


Figure 6.1. Analysis stage 2 – Identifying the Preceptors, finding the right person.

Chapter five analysed the findings of this study in relation to how the terms used in paramedic clinical education were understood by participants and discussed the implications of how not holding a shared understanding of language (or symbols) can impact on the uptake of and performance of roles in society. Chapter five concluded with the proposition that the term preceptor most accurately reflects the role paramedics perform when working with learners. This chapter analyses the data that emerged regarding who fulfils the preceptor role, continuing the actor analogy derived from role theory, this chapter depicts the casting process. Section 6.2.1 describes participants' concerns about lack of choice in working with learners; Section 6.2.2 presents findings on the barriers to selecting the right person for the job; Section 6.2.3 highlights the negative impact that can result when the wrong person is allocated to preceptor the role; and Section 6.2.4 reports participants' views on how paramedics should be selected and what the considerations should be with regard to experience

and qualifications. Section 6.3 will follow the pattern established in Chapter 5 of discussing the findings reflected in Section 6.2, in relation to the literature, foreshadowing recommendations for change and improvement.

6.2 Finding the right person for the job

6.2.1 A matter of choice.

The availability of choice and the inability to decline the preceptor role was highlighted by all participants as a concern to them. Participants expressed the belief that there is currently no option given to paramedics in working with a learner, and should the option have been there, some may have declined on one or more occasions. This was summarised by Samantha:

I think a lot of it comes to the people should be asked [my ambulance service] has this problem of just rostering you with someone, or you are [told you are] their preceptor, and a lot of the people don't want to precept and I think that is the first thing they should do, they need to start communicating more with their preceptors. (Samantha)

Participants reported that they were often not aware of the requirement to be a preceptor until the learner allocated to them arrived at the station. The combination of having no choice in whether to perform the preceptor role, and having no warning of their allocation of learners contributes to negative experiences as explained by Michael:

[Preceptors] tend to get uptight... when they lob up to work and, you know, on that day they find out that they've got either a student or probationer, causes some angst with some people, which is not a good. (Michael)

The lack of choice in working with students has a potential subsequent adverse effect on the experiences of the learner. When paramedics do not want to work with learners there can be a negative effect on both the paramedic and the learner, with the preceptor being subject to lower levels of job satisfaction and potentially leading to a poor learning experience, as Tanya explained:

Some people enjoy it [working with learners], some people don't and the fact that you generally don't get a choice if you're a preceptor or not can have a big impact because some people just aren't interested which is detrimental to both them and the student because neither of them are going to be happy at work. (Tanya)

Participants highlighted how a lack of choice led to resentment, reflected by Tracey:

We were told everybody has to precept in this service, it is not an option, this is the way we want it done and that is it. So for me that is not enough, I don't think that it is appropriate. (Tracey)

Tony reinforced the sentiments expressed by Tanya and Tracey, suggesting that not only will some paramedics be uninterested; they may actively resist the role:

Some people feel it is just thrust upon them to be a preceptor. I mean OK if it is a choice, like I want to do the role, you know, I'll do my best. Whereas I think it is being thrust upon someone... some people might not even care, and not teach them [the learner] anything. (Tony)

What the data does not reflect, and therefore is an area needing further investigation, is what causes this resentment. Is it the lack of choice or the absence of a desire to work with learners? Or perhaps resentment is more situational and affected by other factors that will be analysed in Chapters seven and eight. This lack of willingness has

resulted in a view that being a preceptor and working with a learner is simply additional work. Rather than seeing the positives and opportunities associated with the preceptor role, it was sometimes seen as akin to a chore, as Richard explained:

They'll rock up at the station and there's numbers of stations that just resent having trainees. They see them as work. They don't see them as their opportunity to help somebody. They see it as work... So, they disengage. (Richard)

While participants highlighted lack of choice in working with learners as an issue of concern, it was also recognised that there are people that want to perform the role, and who are good at it. Illustrating his own positive outlook, Darren explains;

I like being a preceptor, I know there are good ones and bad ones and the fact that you can't say it's not a voluntary sort of a thing. It's just sort of an expected thing, you get a huge amount of variation in quality of preceptors. (Darren)

Participants were particularly strong on their proposition of a solution to the problems associated with having disinterested or unwilling paramedics working with students, as Charles explained:

Set up preceptor roles... capitalise on people that are going to be good at it... because that in turn is good for the whole organisation. You are picking the best people to do that role and those that will be good that can be trained up to the role should be. (Charles)

However even in those situations where paramedics have indicated their willingness to work with learners, the lack of prior communication was highlighted as a barrier to their willingness on a case by case basis, as Paul described:

He came basically without any warning just here you are working with him, I had told my management that I was interested in doing that sort of work. (Paul)

Whilst the preponderance of evidence in the data pointed towards a lack of choice in, and lack of communication about the allocation of learners to paramedics, Kerrie highlighted that there were local variations in managing the process:

some areas where it is a rostering issue you will just get stuck with a probationer [learner], in other areas, if they are lucky enough to have a boss that gives half a damn, he will ask people if they are interested. (Kerrie)

Participants in this study were consistent in their reports that, with the exception of ad hoc local variation, they were given no choice in whether they would act as a preceptor. Furthermore they reported this lack of communication and consultation extended to occasions where the first they knew of their appointment as a preceptor was the arrival of their learner in the workplace. This lack of consultation was described as an avoidable cause of negative workplace and potentially learner experiences. It is important that employers recognise the value of effective communication in order to create a positive experience for the preceptor and the learner.

6.2.2 Barriers to getting the right person for the job

Participants highlighted a number of barriers facing ambulance services in finding the right person for the preceptor role. These barriers include the need for preceptors to be: experienced as a paramedic; a capable paramedic; a capable preceptor; and willing to undertake the preceptor role. With regard to experience as a paramedic, participants identified that as soon as paramedics complete their qualification in either

the vocational or tertiary models they are allocated a learner, without the opportunity to consolidate their knowledge and gain experience. Brian and Chris explained:

There is an expectation within our organisation that qualified officers [paramedics] precept both interns and qualified staff, new employees in the organisation. (Brian)

Whenever you got qualified you worked with a student as such, whether it was an intern, probationer, or uni ride-along. As soon as you get qualified you just get put with one of those people. (Chris)

The move from a vocational, apprenticeship model of paramedic education, outlined in Section 1.3.2, to a tertiary model reduced the number of employed paramedic students, as the industry went from employing students for a three-year period of learning to employing interns for one year of workplace learning following graduation and prior to being permitted independent right to practice as a paramedic. While this change reduced the demand on paramedics to work with paid students, conversely there has been a substantial increase in student paramedics seeking placement from universities across the country. The impact of this change was highlighted by Samantha, whose initial assertion was that learners employed in her ambulance service are better off under the new system, but then she acknowledged (with some prompting) that university students on placement receive less than ideal support:

Because we have only got 6 interns in the region now, they are getting the higher level, higher quality preceptors and then when it comes to the ICP students, they get the regular ICP preceptors and return to work people were getting that sort of stuff as well, so it's all quite a positive training experience at that moment... [the university student

students are] *not necessarily getting the best people, we got flooded with them this year, there are quite a lot of them... (Samantha)*

While it could be argued that the change in educational model may provide some explanation for the lack of choice in undertaking the preceptor role in the current system, Simon confirmed that the lack of choice is not a new problem and precedes the university model:

I'm talking about what, 10 to 15 years ago, we were just lumped with a junior paramedic who we had to mentor through their basics... the paramedics were just told "you are going to have your level one or you are going to have your level two and you are working with them".
(Simon)

A recurring theme amongst responses was that to be a preceptor paramedics must first be good paramedics. The concept of a good paramedic was not explored further in this study, however it presents a potential question for future investigation, seeking information on what paramedics think constitutes a good paramedic. During data analysis I find myself wondering if there is a relationship between professional experience and the concept of a good paramedic, as inexperienced paramedics will not have had exposure to more than a narrow range of clinical presentations, and mostly under supervision. Therefore, can a new graduate having just completed their internship be considered a good paramedic, and therefore are suitable to be working with learners? This theme emerged through the data in my research; for example Tracey described the concept that first paramedics need to be good paramedics:

I think to be a good preceptor, you have to be good at the paramedic role in the first place and some of these people are not good in that

role [the paramedic role] and then to top it off they are perhaps not the best for the preceptor role either. (Tracey)

While being a good paramedic was identified as an important element of being suitable for working with learners, the reverse was not considered to be true, that all good paramedics are good with learners. Accepting that not all paramedics are suitable for or have the capabilities for the role of preceptor further supported by Lisa:

I don't think that that blanket rule [that everybody should work with learners] suits everybody. There are some fantastic paramedics out there that just shouldn't teach. (Lisa)

The final barrier reported in this study to finding the right person for the preceptor role is finding someone willing to perform the role. This is not to suggest that there are no paramedics willing to take on the role, but more that willingness is something that can be identified through communication, and which is also affected by the paramedic's capability of performing the role, as already discussed. Ira explained:

It is really hit and miss, from a mentor's perspective, you know this paramedic might be really interested, keen and good and can have the package to develop new staff, the next paramedic might be really keen at it but not be very good at it. A paramedic might be good at it but not keen at it. You know, or any combination of those variables. (Ira)

The factors that affect willingness to undertake the preceptor role became a point of discussion for a number of participants. While some reported being intrinsically motivated by their own job satisfaction, others also spoke of extrinsic motivators such as career development and opportunities such as progression in the education field (motivators will be discussed in further detail in Section 8.2.1). Additionally, including

reward systems for performing the role, such as a monetary reward, emerged as a common thread within extrinsic motivation. Yet, as Kerrie explained, it is possibly a poor choice of motivator as it is likely to result in the wrong person in the role:

... people that are good at it need to be picked to do it, not the people that don't want to do it... remuneration is bad to offer because people will then do it for the wrong reasons, not because they want to
(Kerrie)

Kerrie further outlined that the selection for the role of preceptor should require a selection process and be based on an assessment of staff by their station manager. As Kerrie reflected, a station manager should have the following in mind when deciding who to appoint to the preceptor role:

"these people are really good, they are keen and they are switched on, they are up to date, they have an interest in training". (Kerrie)

In summary, the practice of expecting all paramedics to act in a preceptor role comes with a number of risks for role performance. While there are a number of paramedics to select from, the lack of experience, capabilities in either the paramedic or preceptor role, or the lack of willingness to undertake the role can result in the wrong person being cast as the preceptor.

6.2.3 When the wrong person does the job

Participants identified a common problem when the paramedic acting as preceptor is not suited to the role or does not possess the capabilities required of the role. For example, the quality of the paramedic's own clinical practice may be poor, making them ill-suited to working with learners and training them to be competent paramedics for the future, as Terry explained:

Some people have not maintained their [competency as a paramedic]... I have seen some pretty bad sharing of skills, I've seen some flawed sharing of skills [that] has had to be corrected. (Terry)

Kerrie reinforced this assessment and extended it to include not only a lack of clinical skills, but also poor attitude, indifference toward the profession and occupational burnout:

[Y]ou have got to put probationers with somebody and unfortunately in some cases that is what it is... a probationer is put with somebody... there are people who don't want them, they are put with people who... you know, really don't care, they are put with people who are burned out, or they put them with people who shouldn't be paramedics themselves. (Kerrie)

This was further reinforced by Lisa who suggested that some paramedics could have a detrimental effect on the learner:

...and if I come out as a crap paramedic, and I've got bad attitude and bad clinical skills, and you give me a student and I teach them my shitty attitude and my shitty clinical skills, what hope do they have? (Lisa)

Tony suggested that the logical outcome of this practice of learners working with and learning from inappropriate preceptors was, potentially, that the learners then become poor paramedics themselves whose practice needs to be fixed at a later stage:

Well I'd just like there to be a choice to be a preceptor. I think more of us should be making this choice and actively thinking, 'well if we want a better service, we've got to ...make sure these guys on the right track

early.' rather than try and fix the problem late because they don't know, they haven't been taught. (Tony)

The quote from Tony emphasises a need for the paramedics to become part of the solution to the problem - while it is appropriate that paramedics can choose to be a preceptor, the profession needs more capable paramedics to want to make this choice. Future paramedics need the people being cast into the preceptor role to be both good paramedics and a good preceptors. Such people need to be identified and chosen for the preceptor role through the creation of selection criteria and a formal selection process.

6.2.4 The need for a selection process.

Participants emphasised that in order that the right person performs the role of preceptor, the profession needs a system where individual paramedics are able to opt-in or opt-out of the role, as well as a process that incorporates selection criteria for the role, as Chris suggested:

I don't know if my workplace they recognise who's a good training officer and who's not a good training officer. But I think there needs to be some sort of selection criteria of "I think Person A would be good to work with students and Person B may not be ready yet to work with students"... they need to be more picky about sort of who they choose to be training officers instead of back when I first joined, as soon as we were qualified, you work with the student. (Chris)

While the ideal process for ensuring that the right people undertake the preceptor role might be one in which paramedics can both volunteer for the role, and be chosen by way of a robust and effective selection process, there is also a need for successful candidates to be provided with respite from the role (stress, fatigue and the need for

respite from the role is discussed in more detail in Section 8.2.6). Tanya highlighted, however, that while not all paramedics might be interested in or good at the preceptor role, the lack of suitable paramedics (crews) impacts upon the potential pool of preceptors:

It would be nice if everyone was a wonderful mentor but you can't make everyone a good mentor if they're not interested. In an ideal world they could put their hand up if they want to be a mentor, that would probably be more effective as well but there probably isn't enough crews out there to do that. It would be nice if everyone put in the effort but I guess they won't. (Tanya)

It was of concern to the participants in this study that the lack of suitable preceptors, coupled with high demand for these skills, has a detrimental effect on the paramedics themselves. As Tony explained, preceptorship could be perceived as punishment for being good at the paramedic role:

There was one person at one of my stations that seemed to get the trainees all the time and he was getting exhausted. It was almost like he was being punished for being good at being a preceptor or mentor. (Tony)

Richard felt that the profession needed to not only identify the right person for the job today, but to build capacity in the workforce to enable paramedics to develop into the role into the future, which might mitigate against this burnout:

There's a certain capacity for some people to be good preceptors and other people who won't. I guess, there's people who are just mediocre. So, how do you identify those who are good at it?... What I

see that we need to do is come up with a way of identifying those people who are preceptors, who have that in them -- they might not have discovered it in them[selves] yet. But, they would if they could. And, how do we get leverage from that. (Richard)

Throughout Section 6.2 I have outlined the data indicating that there are flaws and inconsistencies in how paramedics are selected, or more accurately directed, to work with learners. These systemic flaws include a lack of choice in performing the role, a lack of criteria underpinning selection for the role, a high workload resulting from taking on learners, and the potentially negative impact on both the paramedic and potentially the learner as well. Commentary from Paul provides a useful summary of the emergent themes about what is needed to ensure that the preceptor role is effective and valued by paramedics:

I think it should be a harder process to become a preceptor, and a teacher and an educator too, because this is people's lives and careers that are you know... you are dealing with too, and they [university students] are fee paying people too... this is probably not the best word... but it should be an honour to do it, not just because you have got a bit of an interest in it, it is like doing any role in the service, you know, you should have to apply, meet the selection criteria and that way you are going to get a person that is committed to it, I don't think there is a lot of commitment sometimes with some of the people. (Paul)

What these selection criteria might be was not an area investigated in my research and provide, therefore, an area for future research, given the unique environment in which paramedics practice. Questions include what the capabilities of a paramedic preceptor

are, or should be, to enable the development of broader criteria and standards against which paramedics are assessed and selected for the role.

6.3 Discussion – The right stuff

Section 6.2 has provided an analysis of the data surrounding choice, suitability for the preceptor role and selection into that role. Section 6.3 continues this analysis with reference to relevant literature.

6.3.1 Part of being a profession

Section 6.2 has highlighted the concerns held by participants about both individual paramedics' suitability for the preceptor role, and the manner in which they take on and persist in the role. Participants noted that not all paramedics are suitable for the preceptor role; that they should be given a choice in whether or not they take on the role, with arguments that not all paramedics are suited to being a preceptor. Not all good paramedics are good preceptors and even those with the capabilities required for both will at times need respite from the role, particularly in the face of the workload and demands of preceptorship.

The functions of teaching, mentoring and clinical supervision that make up elements of preceptorship discussed in this thesis have been highlighted in the literature as core competencies for paramedics (Kilner, 2004; Williams, Onsmann, & Brown, 2010a). These competencies are also reflected in the professional competency standards issued by a number of professional and industry bodies including The Council of Ambulance Authorities (2010), Paramedics Australasia (2011), the UK College of Paramedics (2017) and the Irish Pre-Hospital Emergency Care Council (2014). Teaching, supervising and assessing functions are also identified as elements of good practice in the newly published code of conduct for registered paramedics in Australia (Paramedicine Board

of Australia, 2018a). With this code of conduct as a guide, an argument could be presented, therefore, that preceptorship is an expectation of any qualified paramedic. Such a requirement, however, ignores the key point made by my research participants that not all paramedics make good preceptors and that, even if they are capable in the role, there is a need for them to have some respite from the role.

Participants' concerns that not all paramedics are suitable for the preceptor role is supported in the literature related to other health professional contexts. In the nursing context for example, Fawcett (2002) highlighted that whilst a nurse may be assigned to a mentor, there is no assurance that the mentor they are assigned to is indeed a suitable mentor. Merritt (2018) echoed this sentiment in relation to emergency medicine, recognising that by simply being an emergency medicine physician, you are not necessarily an educator. Similarly in the field of dentistry a lack of quality mentors has been reported as an area of concern, and even highlighted as a reason for discontinuing mentor programs in the past (Blanchard & Blanchard, 2006). So issues related to choosing and/or educating professionals to take on the role of preceptor, or its equivalent in other contexts, is not confined to paramedicine.

The appropriateness or otherwise of a given paramedic taking on the role of preceptor can also be subject to change over time, as there may be times when preceptors need time away from the role in order to 'recharge their battery' as identified in Section 6.2. It has been acknowledged in the literature that the role of preceptor is one that can result in burnout (Hall, 2016) which is an important factor to consider when selecting the right person for the role. While acting as a preceptor might be considered as a normal activity for members of the paramedic profession, it is important to bear in mind role fatigue when considering how this role is conceived of and supported. Allowing an opt-out capacity from time to time for paramedic preceptors should they

recognise a need for respite, would help prevent burnout and negative experiences for both the preceptor and the learner. Further discussion of the impact of preceptor stress and role fatigue are addressed in Chapter 8.

Paramedicine has been striving toward professional standing for some time in Australia and internationally, which is well reported in the literature (First et al., 2012; Joyce et al., 2009; Murcot, Williams, Morgans, & Boyle, 2014; van der Gaag & Donaghy, 2013; Williams et al., 2009; Williams, Onsmann, et al., 2010b). Professional competency standards released by The Council of Ambulance Authorities (2010) and standards of good practice published by the newly formed Paramedicine Board of Australia (2018a) both speak to the expectation to share knowledge with others. This is consistent with other professions and is reflected in such documents as the Declaration of Geneva for medicine (Parsa-Parsi, 2017) or the Hippocratic oath (Merritt, 2016). However in light of the findings discussed in this chapter, I would propose that there is a difference between the professional obligation to pass on or share knowledge, and the provision of formal and extensive educational role such as a paramedic preceptor.

6.3.2 A considered rather than opportunistic appointment process

The findings outlined in Section 6.2 suggest that ambulance services currently employ opportunistic, convenience allocation when appointing paramedics to the role of preceptor. While there may be some greater degree of discrimination when considering some learner types (see Samantha's commentary on improved preceptor quality for interns and ICP students compared to university students in Section 6.2.4) overall the approach is one of allocation rather than selection. This phenomenon is reported in the nursing literature as an area that profession has learned from, with improvement in preceptorship through the implementation of strategies such as a selection process, preparatory program and evaluation process (Altmann, 2006).

This research reported here has also identified that paramedicine in Australia might struggle to find enough capable paramedics to undertake the preceptor role. While introducing suitable criteria, standards and selection process alone may assist in the appointment of suitable people into the preceptor role, the profession may find itself unable to service the needs of learners in the short term. It is important that the profession considers the larger picture solution to addressing the preceptorship role. In Chapter 5 I outlined the need to accurately identify the role and the expectations of that role, in this chapter I have reflected the detrimental effects associated with expecting all paramedics to perform the preceptor role, and therefore the need for a selection process as part of the solution. The solution does not stop here though, in Chapter 7 I will extend the emerging role performance theory of preceptorship to build the capabilities of paramedic preceptors in the preceptor role.

6.4 Chapter summary

This chapter has highlighted the current model of expecting all paramedics to perform the preceptor role as one fraught with risk. The outcome of this approach is that paramedics that are not ready or who are unsuitable for the preceptor role get drawn into working with learners. Further to this I have shown that even those paramedics that are motivated to work with learners, there will be times when they require a respite from the role. Therefore it is essential that ambulance services consider alternative approaches that include a selection process for the role, as well as a capacity to opt out of the role at times where respite is required. Extending the actor analogy in the emerging role performance theory of preceptorship, this would equate to the casting process, where actors apply for and are cast into the role for a period of time. Chapter 7 will take this theory further to the role of the director, in outlining the need

for training, development and direction in the role as well as rehearsal prior to performance.

Chapter Seven – Role preparedness

7.1 Introduction

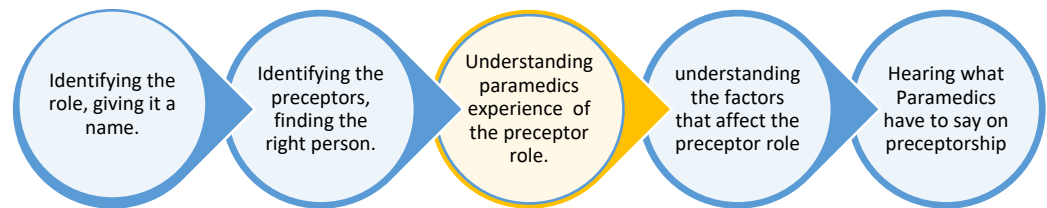


Figure 7.1. Analysis stage 3 - understanding paramedics experience of the preceptor role

In Chapter 5 I presented and analysed data regarding the language used to describe working with students in paramedic clinical practice. This was explored from the perspective of how language affects understanding and role performance. Chapter 6 outlined the issues surrounding who is working with learners, how they are selected and how this impacts on their performance of the role. This chapter will build further on the experiences of paramedics and how they prepare for and perform the role of working with learners in an operational clinical setting. This chapter begins by analysing how paramedics view their suitability for the role with regard to clinical experience and confidence both as a paramedic and as someone then expected to work with and support learners. I then report how paramedics are prepared for the preceptor role, from an initial clinical, continuing clinical (professional development) and educational perspective. This chapter concludes with an analysis of how paramedics perceive that these elements affect their performance in working with learners, both at the outset of

their careers and as they progress, taking into account the changing clinical and educational environment of paramedicine.

As with previous findings chapters, this chapter is divided into two sections, with section one presenting the data with an initial analysis of participant quotes, and section two analysing the data with regard to existing knowledge and highlighting gaps in knowledge or areas of new knowledge as they emerge.

7.2 Experiences in working with learners

7.2.1 A matter of experience and confidence

As reflected in Chapter 6, the right person for the job of preceptor in paramedicine would be someone who is willing to take on the role and holds dual capabilities, capability as a paramedic, and capability as a preceptor. This section will begin the analysis of how participants viewed both capabilities, and how they may have been interwoven, with preceptor capability having a foundation in, yet also reinforcing capability as a paramedic.

Participants in this research indicated that despite the indications in Chapter 6 that paramedics are expected to work with learners right from the day of qualification, there is a need for paramedics to be sufficiently experienced as paramedics as well as confident in that role before they work with learners. Roger explained that while paramedics at the outset of their qualification have a wealth of knowledge, their experience is limited:

Back then when you start out you might have quite a lot of specific knowledge. Generally back then, well I'll speak for myself, I was recently qualified, I'd just done a whole lot of exams and study and so on and I'd studied the guidelines and I'd been signed off and having

particular knowledge and information, I was fairly high on that but I was relatively low on the experience side of things. (Roger)

Roger's comments are particularly interesting because he commenced his career in the older vocational model of education; completing a three-year diploma qualification which involved block release periods of classroom training punctuated by significant periods of on the job practice. This also included periods of time where diploma students worked on an ambulance but not in an 'on-the-job training phase', instead simply working as a second officer on an ambulance, giving them additional exposure to experiential learning opportunities outside of the need to achieve formal education goals. Therefore, this older model gave diploma students considerably more on-the-job experience than students completing the modern educational model, which has limited clinical placement followed by a one-year internship. Roger went on to discuss his misgivings about his suitability as a preceptor early on in his qualified paramedic career, based on his lack of experience and confidence as a paramedic:

[Speaking in hindsight] Those early days... I don't really know what I'm doing myself, I don't feel that confident and now I'm in a role where I'm having to teach people. Having a bit of a degree of insecurity I would learn some things, I would feel some confidence that I would learn some stuff and I could talk about that but what I was less comfortable with was the things that I hadn't actually learnt very well myself... back then I was still making my own mistakes clinically and missing things and whatever and here I was in a position as a mentor trying to impart some of that knowledge so there was a bit of discomfort I suppose around that. (Roger)

Roger's assertion that he was not experienced enough early on due to the relatively small amount of time he had spent on the job, creates further uncertainty about the extent to which it can be assumed that modern newly qualified paramedics are adequately experienced to work with learners. Paul shared Roger's concerns, commenting that experience and confidence in clinical practice are two key elements paramedics bring to the preceptor role and both are lacking in the newly qualified paramedic:

The more experience you have got, the easier it is to teach it really, you know you might not teach it as well formally but you should be able to pass on those clinical skills a lot more efficiently than someone that hasn't had the experience or the confidence, and a grad just out of the uni, they have got the knowledge and the qualification, but it is the skills and experience that I think a good preceptor brings to the whole process. (Paul)

Clinical experience and confidence as a paramedic, combined with the knowledge of a qualified paramedic contribute to a paramedic's 'clinical preparedness' for the preceptor role. While referring to a qualification from the vocational training model, Brian defined clinical preparedness:

Once you have finished your three-year course and you have qualified you have passed all of your academic requirements and you are deemed competent, that is your clinical preparedness and you are now expected to precept [laughs]. (Brian)

Richard explored the concept of clinical preparedness further, describing it as the combination of knowledge and experience gained through working as a paramedic, and highlighting its variability depending upon work circumstance:

Your clinical preparedness is thrust upon you by the daily exploits that you get up to on the job. It's just the wide array of jobs and you're practicing your skill all the time and you're in touch with what's going on and you're thinking and talking and eating and breathing it [paramedicine]... it's just a constant turnover of work load... I think if you go to a quiet station in the back of nowhere, your clinical preparedness is lost in the void of TV shows and the magazines you want to be reading. (Richard)

The clinical preparedness of vocationally trained paramedics immediately following qualification was a focus for participants as it was viewed as inadequate preparation for being placed with a learner. However, participants reported a recognition of their need to expand their knowledge and reported a tendency to be self-directed in maintaining and building their knowledge, as Darren highlighted:

Most of my clinical type of strength now has been I think self-taught. As a preceptor I think that you need to be current and you need to know things really, really well but I don't think that my daps course [vocational diploma of applied science – ambulance] and I don't think my intensive care course did that very well in a formal sense but those sort of allowed me to spread my wings and sort of self-teach. (Darren)

The evidence of self-direction reflected in Darren's comments raise the possibility that other, less motivated paramedics might be less than adequately clinically prepared and might fit into the description of the 'wrong person for the job' described in Section 6.2.3.

7.2.2 Training and preparation for the preceptor role

The way participants in this study viewed their own clinical preparedness to work with learners, reported in Section 7.2.1, raises concerns about the clinical preparedness of newly qualified and less experienced paramedics. Newly qualified paramedics have an additional burden placed on them when they are allocated a learner. These inexperienced paramedics not only need to deal with patients and gain their own clinical experience, but also supervise their learner and learn how to work with and support the learner in their learning, as Tanya explained:

I guess for me one of the big experiences has been learning for me to be a preceptor as well because I'm so new. I mean I'm only a new paramedic and I've never taught anything else in my life so me teaching someone else is a new thing as well so it's been quite interesting to have to do all of that sort of figuring out teaching methods and stuff that I've always heard people talk about but never had to do myself. (Tanya)

This additional challenge faced by newly qualified paramedics is often compounded by a lack of organisational support for training in the preceptor role. Participants throughout this study were critical of the training available to them, with Brian explaining that the training he received focussed on what clinical standards to look for rather than how to support the learner in achieving those standards:

There was no formal preceptor training as such, it was mostly around standards of care that the organisation set, so it wasn't "here are the techniques that we are providing you to assist you in ensuring that the student is progressing to the direction we want or the standard we

want"... no techniques or provision of training around how to deal or how to have the difficult conversation were provided for... (Brian).

Terry reiterated Brian's experience and also identified the lack of training on how to be a preceptor and help learners to learn:

So it was very, very simple, very rudimentary but nothing at all as to what you would expect as to how adults learn... the different styles people may learn under... it's a travesty, it's an opportunity missed, especially when we have students who struggle. I think there would have been a lot of benefit there. (Terry)

Terry further explained that the only opportunities he had access to in order to develop in the preceptor role were self-directed, rather than provided or supported by his ambulance service:

Anything I had to do with that I picked up myself either through subjects that were part of something that I was doing at uni or just because I was interested enough to sit down and read it but ambulance itself has never, in my view, prepared a mentor or a preceptor in [my state]. (Terry)

Whilst Terry's concern about the lack of training or preparation provided by their employer was consistent with the experiences of many participants, it was not the experience of all participants, including those within the same ambulance service. Brian, for example, outlined training in the form of workshops provided by his ambulance service, and as Charles highlighted, sessions offered during ambulance service-based training vocational paramedic training:

The organisation had a bit of a change and ran some brief preceptor programs to assist those interested [in working with learners], in providing them with feedback, feedback techniques and it was mostly around how to deal with students and those sorts of things. (Brian)

I think the service to a degree now throws that training side of it into the standard ambulance officer training [diploma course]... I got offered it with some RPL so yeah I took that one up, it wasn't required but I took it up (Charles)

As participant responses demonstrate, the extent to which formal education for the preceptor role is provided varies, as do the requirements for initial preceptor education. What is consistent, however, is that where participants reported receiving some form of education, they described it as being limited, as Chris explained:

I think when I got trained as a qualified paramedic, I think maybe they gave us maybe a three hour talk on it, if that. But I think I sort of trained myself... So we would do like every 18 months you have to go back to a training, an education centre and they just basically run over a few things that they want you to relearn. And I remember there was another session on working with probationers [paramedics in the final stage of their vocational training]. That would've been another maybe two hour session on it. (Chris)

Julie also outlined a requirement that existed previously in her ambulance service, to gain the Certificate IV in Workplace Training and Assessment; a requirement that has subsequently been removed. It is important to note that Julie was referring to a

qualification delivered by an external organisation, which would not have been customised to the workplace environment in which paramedic preceptors work. Such a qualification would still have been preferable to the current lecture provided to vocational trainees, as Julie explained:

Everyone did have to get a certificate 4 from one of the places that does [certificate IV] training. But, they [the ambulance service] did away with that. And, now that's not a standard practice... So, now they have within their final part of... the vocational course, where you do that training and it's delivered by lecture... So, if anything, probably the training is not as good, because the cert 4 is a good way for people who haven't got that experience in education to get a bit of a handle on what concept is behind it. (Julie)

Importantly, the comments provided above referred only to the training experienced by those who had undertaken the vocational Diploma of Paramedical Sciences. These comments do not shed any light on the experiences of paramedics who have undertaken the tertiary model of paramedic education and entered employment as graduate paramedics.

What is evident in the data, however, is that the opportunities for education and professional development to build the capacity of paramedics in the preceptor role has been variable or inadequate in the past. This situation resulted in some participants in this study taking matters into their own hands by pursuing their own education. As Michael's comments below identified, however, despite expressing interest in enhancing his preceptor skills, he was unable to gain organisational support for his attendance at a professional development short course:

I have done a course with the Ambulance Service because they had a lot of probationers, within the Ambulance Service, which I suppose is similar to, but not exactly the same as, the students. I just did that course off my own bat. I asked them to put me through and they said, no, so I said I want to do it on my own time. (Michael)

Michael's experience reflects the experiences of other participants who wanted to access learning opportunities related to the preceptor role. Tanya described her use of an elective unit in her university degree to build her capacity to work with learners:

I haven't done anything specific to precepting outside the degree but there was the class that I did with you I think that was teaching a lesson or something which was good to get some experiences standing up and talking to people that you might not necessarily know that well... That class was actually handy because you have to write something or draw it out as other people will understand it. My own short hand makes sense in my head but you need to think what makes sense in other people's heads because it might be quite different to your own. So that unit is probably about the only thing I can think of as being the only other thing that contributed to being a preceptor. (Tanya)

The unit Tanya was referring to above is an elective unit she undertook as part of her degree conversion, focussing on the role of a preceptor in paramedic practice.

Importantly, this is a student elective not taken by all students, and it is not clear if an equivalent unit is offered in all paramedicine degrees. In the absence of formal education opportunities relating to the development of their capacity as paramedic preceptors, participants also described their engagement in informal learning during

either current or prior experiences as a paramedic to aid them in their preceptor role. Participants referred to learning how to support learning and learners by reflecting on their own experiences as a learner during their training, as William explained.

I think informal training has come about from people who probably mentored me when I was a student more than anything else, whether that was done good bad or indifferent is open to a lot of interpretation, you know people would explain things to you and you go well I don't agree with that so I'll find out if there is another way, or you know you take a bit of the style of two or three different people and you meld them together to build your own style. (William)

Participants then described making use of the experiences shared with them by their peers to aid in refining their skills in working with learners, in effect using vicarious learning (Bandura, 1962; Brown & Duguid, 1991). This can be of particular value when working in locations where clinical caseload is low, as Lisa explained:

I always talk to my peers. And if someone's doing something interesting, I will happily sit down with them and have a talk for hours. Learning through shared experiences is a big thing. Especially when you don't have as big a caseload, you do get a lot more down time to sit and talk about things. (Lisa)

Making use of vicarious learning strategies can be quite helpful to paramedics, not only for building their capacity to work with learners, but also in building their capacity as a paramedic. As an experienced paramedic, having worked within the profession for a number of years, I have witnessed and participated in the type of informal discussions Tanya referred to. Often termed the “tea room table discussion” these situations warrant further investigation as a potential source for learning about being a preceptor

through the shared experience of peers. Tanya explained the usefulness of shared experiences for new and experienced paramedics:

I guess having a chat around the kitchen table at work is very informal but can be very beneficial as well. I'm still now always asking other people at work about their experiences because you might have a bit of a strange case and just throw it out there and see what people say if they have had something similar or any ideas or suggestions or something that might have worked for them. I find that everyone else at work is always a wealth of knowledge to pick their brains about because all the different cases everybody goes to, there is always something that people can share so that can be quite handy just having a chat about stuff because everyone's got heaps of experiences and things to share. (Tanya)

Beyond workplace experience, participants reported drawing on their experiences in external organisations or prior careers to guide themselves on how to function when working with learners. The experiences they referred to were varied, ranging from personal life experiences including involvement in community and church groups, through to voluntary teaching experiences with organisations such as St John Ambulance or in courses such as wilderness rescue, as well as prior careers such as nurses or teachers. Examples of these external experiences are reflected in the comments from Simon and Terry below:

With St John, I run the [local] cadet group... so I'm teaching children. So, I've done a lot of teaching and reflective feedback about things like not using big words and words that they can understand, and I've

also taught Doctors and nurses for first aid and in their advanced skills. (Simon)

I was a little bit luckier because I'm older and I came to ambulance from police and from army where I'd had some instructional training myself, so not teaching which is different, but skills based instruction. I'd had a fair bit of exposure to that, a lot of the monkey see monkey do type stuff, like this, do that, watch one, see one, do one... As a police officer I did a field training officer workshop before I was allowed loose with a probationary constable I had to do this field training officer workshop that was about a week long and basically it was the same stuff I'd done back in the army back in the day. (Terry)

Using personal or vicarious experiences to develop oneself in a role such as this appears to be a useful strategy for participants in this study, and that they sought out such opportunities demonstrates the value they placed on developing themselves as professionals. However, as Charles highlighted, such informal learning does not replace the need for formal training, suggesting that while being an experienced paramedic is valuable, it does not provide the capabilities needed to be a preceptor:

It would be easy to say I have been in the job long enough now I know how to do it but I don't think that necessarily prepares you to be a good trainer but having said that I think the years in my job are worth something you know. (Charles)

What is clear from the findings is that the formal strategies to prepare paramedics to work with learners are either insufficient or in some cases absent. This has resulted in

paramedics motivated to act as preceptors developing a wide range of self-preparation strategies, some of which were summarised by Roger:

There is a generic set of principles that comes out which is you kind of need to read widely, you need to value experience, you need to talk to other people, maybe you need to pick up the phone to the doctor, talk to another ICP, bounce it backwards and forwards between your partners and so on and that's how you go about doing your job and so whilst we might have identified a particular problem there, there is a generic set of principles which I think underlie mentoring. (Roger)

Section 7.2.2 has shown that, despite a lack of formal education for the preceptor role, participants have developed a range of strategies to prepare themselves for the role.

Section 7.2.3 progresses this notion, by discussing how working with learners themselves also aids in the confidence and preparedness of preceptors for their role.

7.2.3 Working with learners

Even assuming that the paramedic has a certain level experience and has undergone appropriate preparation to perform the preceptor role, the move from paramedic to paramedic preceptor working with learners early in the career can be daunting, as Darren outlined:

[I was] extremely daunted. So I thought I knew how to do a job, how to be a paramedic, but it was quite different. Extremely different in trying to translate that to a conscious imparting of knowledge or understanding to a student. (Darren)

Participants emphasised the benefit of working with learners in enabling paramedics to maintain their preparedness for the preceptor role. Richard for example, described

how working with learners early in his career helped him consolidate his own clinical knowledge:

You know I was able to take a whole lot of stuff that didn't make a lot of sense to me at the time, and it wasn't much then, you know. A small amount of knowledge. And it [working with learners] grew me as well. So because in sharing that [knowledge], it reinforced it. (Richard)

This was reinforced by Tanya, who discussed the challenges of the dichotomy in learning and settling into both the role of a paramedic as well as working out how to teach on the job and aid someone else in learning the role of a paramedic:

it's been a good learning experience for me to try and figure out how to teach in itself and be a role model but also good to start teaching other people and you know, get confidence in myself that I do know stuff and I do have something to share. So that's probably what I think of the most I guess because I'm new to it [being a preceptor] so it's a learning experience for me as well... (Tanya)

Tanya went on to speak of the affirmation she gained from being a preceptor, gaining confidence in her paramedic capabilities while also developing her capabilities as a paramedic:

I would say something else that would be important to me is just in general when I can teach people things and see them improve, it's been quite good for me as a new paramedic to build my confidence and go "Yes, I can do this." When I first got a student I thought far out, I still feel like a student myself, am I ready for this, do I still need a preceptor. It was quite good to get some faith in myself that I do know

what I'm doing and I can make the right choices at work and help other people to do that as well. (Tanya)

Participants also described the need to continually maintain their clinical knowledge in order to keep up with the knowledge levels of their learners. Paul explained this with regard to working with university students:

It was great because it sharpens your own skills, because if you are going to talk to someone that is going through uni you know their technical knowledge is usually pretty good and a lot of the preceptor stuff I have found is passing on the practical skills that they don't possess, so yeah it sharpens me up a bit as well as passing on some stuff to them. (Paul)

Participants reported achieving this knowledge maintenance and improvement by attempting to gain access to the materials their assigned learner was studying at that point in time, allowing them to update their knowledge currency. This is of particular value for those preceptors who completed the vocational program themselves, and who were then required to precept university students. Being able to maintain this level of currency is subject to challenges, with participants reporting not being provided with notice of the impending arrival of their learners, thereby preventing meeting them before they commenced their learning experience. As will be highlighted in Section 8.2.6, preceptors are also faced with a wide range of learners studying a range of courses and at varying levels of progress through these courses. Even when considering undergraduate entry level programs in paramedicine, there is wide variation in what is expected of a student at each level across education providers. As Roger outlined, even a day or so of forewarning is sometimes enough for experienced paramedics to be able to refresh their knowledge and prepare themselves before a student arrives:

if they said to me you're going to start working with them [the learner] today or tomorrow, no problems, ok, let's go into it and if there is particular things that I need to learn that we can talk about then I'll do that as we go or whatever but I know now that I've got enough clinical experience, enough nous about how to do the job that I will have something to contribute almost from the first job with most people. (Roger)

It is apparent from the data analysis that just as experience plays a part in rounding out a paramedic's clinical preparedness, experience in working with learners also plays a part in building their capability for the preceptor role. While this does not compensate for the lack of any structured program for preparing paramedics to work with learners, it does assist in building preceptor confidence, as Chris and Brian explained:

I think that, yeah, now I'm better than before just because I've worked with a few students now and I sort of clued in on what needs to get done, what doesn't need to get done. And just I think I'm a bit more better at reading a student in their comfort level with certain things and what I can trust them to do and what I can't trust them to do. (Chris)

as you study more and you get wisdom in practice and wisdom in education I guess your techniques, attitude, your approach changes probably. (Brian)

Throughout this section I have outlined the data regarding paramedic experience and preparedness to work with learners, how paramedics prepare themselves for the role,

and how these two factors are affected by working with learners. The findings of this research indicate that paramedics are being required to undertake the preceptor role and work with learners at a very early stage in their career and that there are serious concerns as to the appropriateness of this expectation. It is also clear from the data analysis that minimal or substantively inadequate preparatory education or professional development is provided to paramedics prior to them being allocated a learner. Both of these findings highlight a lack of understanding within the profession of what is required of paramedics working with learners, as discussed previously in Chapter 5. To address this gap in preparedness, paramedics themselves make use of a wide range of opportunities to develop themselves; from short courses, further education, experiential and vicarious learning, much of which is unsupported by guidelines or direction from their employers or the profession.

7.3 Discussion – the importance of qualifications experience and confidence

7.3.1 Experience, confidence and self-efficacy

Articles discussing the qualities of preceptors and mentors in paramedicine have often referred to them as being, or needing to be, senior or experienced paramedics (Furness & Pascal, 2013; O'Meara, Williams, et al., 2014; O'Meara et al., 2015). The findings of this research, however, have demonstrated that this is not always the case. The assertion that preceptors are always experienced relies on a weighted ratio of experienced and suitable preceptors to learners. As I have reported previously (Edwards, 2011), the volume of learners across the full spectrum of education programs seeking clinical practice experience in paramedicine, makes it necessary for quite junior paramedics with limited experience to work with learners. Only through the availability

of more preceptors can professions ensure they can make use of experience without being forced into reliance on early career professionals still building their primary role capability, in this case as a paramedic. This assertion of experience in preceptors (or similar concepts in other disciplines) as a requirement for working with learners, has been identified in other health professions such as nursing (Blegen et al., 2015; McCarty & Higgins, 2003; Oosterbroek, Yonge, & Myrick, 2017) and medicine (Keane & Long, 2015; Kilminster, Cottrell, Grant, & Jolly, 2007), where staffing ratios reflect the availability of experienced clinicians. However, at least one medical discipline, emergency medicine, is reflective of the position of paramedicine, in its high demand for preceptors and low ratio of experienced clinicians. Emergency medicine practitioners have been reported to experience a high workload and supervision demands, which are seen as a threat to supervision or preceptorship quality (Jelinek, Weiland, & Mackinlay, 2010).

Participants identified that there is a risk associated with newly qualified paramedics being allocated to the preceptor role, as they may not yet have even reached the point of confidence and capability in the role of paramedic. Assuming the additional role of preceptor may be challenging for them; as Roger commented when reflecting back on his early career, that he did not have high self-efficacy in the paramedic role at that time as he was still developing in it. Self-efficacy is defined as “the belief in one’s own ability to successfully accomplish something” (Bandura, 1997, p. 15) and a person’s views of their efficacy in a particular role will have an influence on their uptake of that role. If self-efficacy is low in a given domain then the expectation to perform in that domain can be viewed as threatening, and may negatively impact on role uptake (Bandura, 1997, 2006). In the context of the paramedic profession, there are two domains of capability, that of being a paramedic and that of being a paramedic preceptor. As outlined in Chapter 6, paramedics often have no choice about being

allocated to the role of paramedic preceptor, and participants reported this leading to some resistance or unwillingness of paramedics to undertake the role. Recognising the presence of two domains of capability and considering the potential that early career paramedics may not have achieved a sense of self-efficacy in being a paramedic, let alone being a paramedic preceptor, it is unsurprising that paramedics might resist the role of preceptor.

A reduced level of confidence or sense of self-efficacy as a paramedic preceptor and in particular in working with learners from the tertiary pathway, may be reflective of the fact that the majority of participants in this study entered the profession through the vocational pathway (4 of the 19 participants). While clinical professional development opportunities such as conversion degrees that take the paramedic from a vocational diploma qualification through to a bachelor degree have been offered in Australia since 1994 (Lord, 2003), at the time of the interviews only two of the participants had completed a degree conversion, with another one undertaking a paramedicine degree. In the current context, selection criteria for the role of paramedic preceptor is lacking which was perceived by participants to be problematic when trying to find suitable paramedics to fulfil the preceptor role (See Chapter 6). Including the requirement that potential preceptors have to have completed a paramedicine degree, either through initial entry or degree conversion, may serve to raise the confidence or self-efficacy of paramedics in performing the preceptor role.

7.3.2 Education and professional development

In this chapter participants identified that having both experience and confidence as a paramedic are important factors in being prepared for the preceptor role, however, it is apparent that some paramedics are allocated the preceptor role prior to their developing either. This premature appointment of paramedics to the role undermines

their potential to develop the capability as a paramedic preceptor, which is further compounded both by their potential lack of clinical education (i.e. to bachelors level) and the lack of education and professional development available to them in preparation for the preceptor role.

Professional development for paramedic preceptors is not limited to subject matter related to the preceptor role. The title paramedic preceptor is an inclusive one that represents the two capabilities required of them: the paramedic and the preceptor. Therefore, discussion of professional development for a paramedic preceptor must include examination of both roles. As discussed in Chapter 6, the paramedic profession does not currently provide guidance on what the expectations of a preceptor are or provide selection criteria for the role, inclusive of paramedic or preceptor qualifications. In the face of advancing clinical qualifications and standards of practice in paramedicine, the risk this presents is that paramedic preceptors have no guidance on what professional development they should be seeking or for that matter, whether or not further clinical study is required at all. The potential for a lack of uptake of professional development may be addressed in Australia to some degree with the introduction of professional regulation of paramedics (Paramedicine Board of Australia, 2018c) planned for September 2018. Professional Regulation brings with it a requirement to participate in CPD activities, which are outlined by the Paramedicine Board of Australia in their published standard on CPD (Paramedicine Board of Australia, 2018b). When considering the impact of similar regulatory requirements for CPD in other professions under the authority of AHPRA, there is little published literature on uptake or participation in CPD. Teekens, Wiechula, and Cusack (2018) recently published a systematic review protocol to develop an understanding of the perceptions of nurses and midwives regarding CPD, and in doing so have identified a lack of published literature on the topic. At the time of writing, I remain uncertain about the

extent to which these new regulations will give direction about where that professional development should be directed for Paramedic Preceptors.

As mentioned in Section 7.2.2, in the absence of formal training and development programs, the tea room table becomes an important venue for discussion and learning amongst paramedics and paramedic preceptors. This vicarious learning provides the preceptor with an opportunity to gain knowledge, but also allows for interaction between members of the profession at all levels, with managers, supervisors, paramedics and learners all occupying the same space. This phenomenon, and its role in knowledge generation has been investigated in the higher education sector and identified as an important space for knowledge generation as well as the development of social bonds (Wright & Ville, 2018), which may evolve into the development of traditional mentor relationships. As has also been found in the higher education sector, in paramedicine the tea room as a social gathering place is declining due to the increase in workload in paramedicine (see Chapter 1, Section 1.3.1) which reduces the time available for informal gatherings. The role of the ambulance service tea room as a venue for informal knowledge transfer and generation for paramedic preceptors is an area for future research.

Participants in this study reported that training in the paramedic preceptor role is not a high priority for ambulance services. The perception that staff training is a lesser priority than achieving other organisational priorities such as response times and cost containment (see Rogers comments in Section 8.2.1 regarding the prioritisation of operational commitments over training) is not unique to Australian ambulance services with similar perceptions reported in a study of the UK paramedic Profession (Wankhade, 2016). Based on the findings in this study however, it could be argued that the failure of the education providers, employers and the profession to provide clear

guidelines on the execution of the preceptor role has led to a lack of training programs. Training needs analysis involves the evaluation of the needs of a specific population based on the role performed and the development of a training program for that population (Gould, Kelly, White, & Chidgey, 2004), however to do this we first need to know what the role entails. When discussing the lack of training and need for a training needs analysis, the problem faced by paramedic preceptors becomes more apparent in lack of clear language for the role and a lack of clarity in expectations (see Chapter 5). Further to this, the lack of criteria determining who should perform the role and how they should be selected (see Chapter 6) is problematic for those seeking to develop targeted professional learning. In this chapter I have identified that each of these deficiencies have contributed to a lack of training provision and/or direction. Allen, Allen, and Brownstein (2016) suggested that “Without well-defined roles and clearly articulated training needs, the workforce may not be meeting the needs of its clients” (p. 4), which in the context of a paramedic preceptor may include all stakeholders including the learner, employer, education provider and the patient.

Education and training for a role such as paramedic preceptorship should not be viewed as a single event, it should instead be viewed as a continuum of continuing professional development (CPD). In a commentary on clinical education in emergency medicine, Merritt (2018) highlighted that the absence of professional development for educators in emergency medicine has resulted in limitations in quality outcomes for the learner. Merritt also identified that through professional development, the confidence of emergency physicians as educators rises, as does their professional identity as an educator. Participants in my study described employer provided CPD as being driven by process and compliance factors such as documentation rather than role specific skill and knowledge development. This is consistent with a study by Neary (2014) who found similar challenges in employer provided CPD, in the career advisor workforce

which focussed on process and contractual compliance which in turn, drove her participants to initiate their own CPD. For paramedicine, this leads to a question of what direction CPD will take. My findings have revealed that there is no role description, criteria or explicit qualification required for paramedic preceptors, therefore there is no basis or direction for training and development plans for the role. The provision of a training needs analysis for the preceptor role would be the first step in combating this lack of direction and reduce the risk of wasted training hours (Holloway, Arcus, & Orsborn, 2018).

Revisiting the discussion in Chapter 5, Section 5.3.1, interpretation of the meaning of language is impacted upon by prior experiences, including experiences in professional cultures and sub-cultures. To that end if the goal is for paramedics (actors) to view the role of the preceptor in a given way and play that role in accordance with guidelines or expectations (script), we need to provide them with the experiences (rehearsal) needed to gain a shared meaning. Once the expectations associated with the preceptor role are defined, the provision of suitable training will enable paramedics to develop a clear understanding of the role and form the basis for a shared understanding of what it means to be a preceptor. The absence of a role-specific training program on the other hand will serve as a barrier to role clarification and role rehearsal.

7.3.3 Working with learners as a source of professional development

Participants in this study identified that working with learners aided them in their own development, improving their self-efficacy in both the paramedic and preceptor capabilities. Participants suggested that through working with learners they were able to reinforce their own clinical knowledge, and in the absence of formal training as a preceptor, they were able to learn how to be a preceptor through performing the role. Lopez-Real and Kwan (2005) identified a similar phenomenon when studying the

professional development experiences of teacher mentors. In their study they identified four domains of professional development, learning through reflection, learning from students, learning from collaboration and learning from university staff. The later of these four is unlikely in paramedicine at this time due to the previously discussed absence of communication systems between ambulance services, preceptors and the universities, however the first two are highly likely to occur in paramedicine. Literature on the paramedic educational field does not report on this phenomenon, however this was a clear finding in my research.

As stated by participants in my research, the learners preceptors work with are in the process of undertaking a formal education program, and therefore have access to current knowledge. This has a dual impact on the preceptor, firstly they seek out the most current information to ensure they are able to aid their learner, and second they are able to learn from their learner who brings currency to the learning experience, in effect gaining from reciprocal learning (Nottingham, Barrett, Mazerolle, & Eason, 2016; Stenfors-Hayes et al., 2010). This has been found to be a positive effect in medicine where the mentors were able to enhance their professional development as well as increase their desire to teach, thereby reinforcing the motivation to continue mentoring (Stenfors-Hayes et al., 2010).

The role preceptorship plays on the learning and development, as well as job satisfaction is an area that should be explored further. Through a greater understanding of how this impact in paramedicine we may be able to introduce a more explicit motivator for paramedic preceptor role uptake.

7.4 Chapter summary

This chapter has highlighted that paramedic preceptors are not always experienced, confident or senior in the role of paramedic. The role of paramedic preceptor brings with it dual capabilities, one set of capabilities as a paramedic and another as a preceptor. This chapter has demonstrated that the paramedic preceptor needs to have developed self-efficacy as a paramedic prior to undertaking the preceptor role. This chapter has further highlighted the lack of training and development for the preceptor role, thereby impairing paramedics from developing the second capability set. Training that participants could recall was focussed more on the completion of record keeping and standards compliance than it was on the capabilities of the preceptor. In light of this participants sought alternative training programs or informal ways to develop themselves for the role. It is a finding of this research that a formal, paramedic profession specific education program be developed for the paramedic preceptor role.

Returning again to the role performance theory of paramedic preceptorship, the opportunity to undergo training for a role is in many ways akin to receiving direction on the performance of the role, how to perform, techniques to achieve the best performance, as well as being able to participate in rehearsals prior to opening night. Without the opportunity to learn the role, and rehearse for the role, it is unsurprising that performance is not at the desired level.

Chapter Eight – Incentives and disincentives

8.1 Introduction

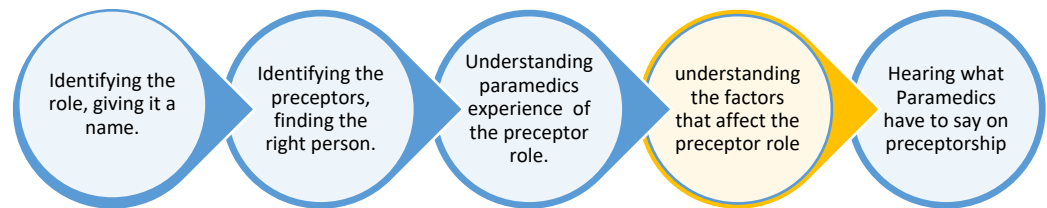


Figure 8.1. Analysis stage 4 – Factors affecting the preceptor role

In the preceding findings chapters I have mapped a trail that is emerging through the data relating to the language used in the profession and the impact of that language on how the role is understood by paramedics. The trail then takes us through how paramedics are appointed to the role (Chapter 6) and their suitability and preparation for the role (Chapter 7). In this chapter I continue to analyse the data to determine what additional factors affect the experiences of paramedics when working with learners. From an initial analysis, these experiences were categorised into six main categories, and each will be examined in this chapter:

- Motivators
- Organisational factors
- Student factors
- Communication, dealing with difficult students and conflict resolution
- Clinical and operational factors
- Fatigue and occupational stress

8.2 Factors that affect the experiences of paramedics

8.2.1 Motivators

Working with learners is a function of a paramedic's role that is incorporated into the standard competencies for all tertiary qualified paramedics, reflected by its inclusion in both the Council of Ambulance Authorities Paramedic Professional Competency Standards (The Council of Ambulance Authorities, 2010) (see standard 9.3) and the Paramedics Australasia Australasian Competency Standards for Paramedics (Paramedics Australasia, 2011) (See standard 1.b.5). As with any job function, there are a range of factors that will motivate or demotivate the people performing them. However, in paramedicine the point of difference is, for the most part, those people working with learners did not enter the career for this role; they entered the paramedic profession to be paramedics and have found themselves placed in a preceptor role. This suits some paramedics and does not suit others, with paramedicine specific factors affecting their motivation or willingness to perform the role. This section will provide an analysis of the data with respect to these motivators.

The data reveals a number of ways in which paramedics were rewarded for taking on the preceptor role, in addition to their normal paramedic role, across the two states that were the focus of this study. These rewards were reported as either extrinsic or intrinsic motivators (Deci & Ryan, 1985), with the former being in the form of financial reward or linked to Continuing Professional Development (CPD) points, and the latter relating to their feelings of a sense of achievement from student success and job satisfaction when working with learners.

In NSW, for example, participants reported a lack of financial reward, which was viewed as a disincentive to work with learners. However, participants from that state did

report receiving reward in the form of points towards their CPD requirements for the year, as Kerrie explained:

It [CPD points] might be a motivator if you are short on points and you don't want to go and do online stuff or you don't want to go do a lecture... you go "oh yeah I will get x amount of points for doing it [being a preceptor]" next year I will do it... (Kerrie)

In contrast, participants from Tasmania reported financial incentives being provided to paramedics working with learners, in the form of an allowance. Interestingly, participants described this as a poor choice of incentive as it presented a risk in attracting the wrong people to the role for the wrong reasons, as Ira and Julie each pointed out:

I'm not so convinced that remuneration is appropriate. I don't want people teaching, mentoring just because they might get an extra \$1.50 an hour on their pay. I think their motivator there is wrong. (Ira)

Paramedics whinge a lot about it, that they should get paid more. I personally disagree. I think that will attract the wrong sort of people. (Julie)

The view reflected here that financial reward is inappropriate for acting as a preceptor resonates with similar sentiments expressed in Chapter 6 regarding barriers to ensuring the right person for the job. Overall, the participants in this study believed that there should be a form of reward or other incentive provided to those working with learners; however, in both NSW and Tasmania the incentive currently provided attracted criticism for the potential to incentivise paramedics not well suited to the role.

Participants in this study preferred recognition as an incentive, rather than financial reward, with recognition coming from employer or educational organisations, as William explained:

I think that preceptors need to be rewarded in some way, I am not necessarily saying it has to be monetary reward but there has to be some recognition of the work that they do... from the organisation not from the people who are [being] mentored on road if that makes sense so there needs to be some organisational understanding and recognition of the work they do... I think there needs to come from the organisation a recognition that... preceptors are vital to the development of paramedics in the first place. (William)

Julie supported William's comments and proposed that one option was to give certification in some form to those people acting as preceptors:

I would still have some sort of formal recognition outside, that you've done some sort of training, whether that's an acknowledgement. It can even be a certificate or something separate to your degree or your vocational diploma -- whatever you get -- something that's different that says, "I have been through a proper mentor training." I think the value of mentoring dropped when we lost the cert four and it just became like a part of your job. (Julie)

Julie's suggestion, however, presents challenges in the absence of an education program in the current system upon which to base certification.

Overall, participants reported enjoying the experience of working with learners.

Beyond extrinsic motivators, participants also reported intrinsic motivators such as

feeling rewarded by the success or achievement of their learners, job satisfaction and the mutual educational and clinical benefits described in Chapter 7, Section 7.3.3.

Tanya explained that her own recent experiences as a student motivated her as she could relate to the student experience and associated stresses and needs. This aided her desire to assist learners and became a personal motivator:

I think for me it's also a little bit personal as I was a student so recently. I know what it's like, I know how hard it is so I really want to help these guys get through and try and make their experience positive even if they are struggling. I really want to help them out and make them still enjoy coming to work and feel as though they can improve. (Tanya)

Beyond the motivational influence of learner achievement, participants also reported feeling motivated by working with learners who are keen to learn. These two factors made the preceptor more keen to work with learners as Tracey highlighted:

I think that definitely has a massive impact, the students that are keen to learn and really want to develop their skills, and it is important to them to do the right thing, it is easier to build a really good interpersonal relationship with them because they are keen and I am keen. (Tracey)

Following from Tracey's comment that working with a keen learner is motivating, facilitating learner success and growth as paramedics was also reported as a strong motivator for paramedic preceptors, as Tanya explained:

Seeing how much she [the learner] improved when I explained to her my systematic approach, this is the formula I follow on the job, it was just lucky that the way I did things was similar to her. (Tanya)

Similarly, Brian described the extent to which student success is a motivator by reflecting on how witnessing change or growth in his learner made working with that learner one of the most enjoyable experiences in his career:

...probably one of the most enjoyable periods of my career, having the ability to influence others in a positive way, to assist them in their practice... getting them to think, more broadly of life and their practice. Versus a narrow focus, a narrow window that they previously would have experienced, so I think that is the most enjoyable, taking the blinkers off people, that is quite enjoyable, and you can see it, you can almost see it when it happens, it is actually good when you see it happen (Brian)

Richard highlighted that not only does the paramedic gain through increased job satisfaction, but there is also a longer-term patient outcome benefit when a learner is working with a suitable paramedic motivated to perform the preceptor role:

There's more benefit for the patient and patient outcomes by a good clinician at the other end of it. But, you get benefit out of it by going to work and enjoying your job. (Richard)

The absence of a formal (non-financial) recognition for being a preceptor was reported as having a de-motivating effect on paramedics. Participants viewed the role as an important role that was undervalued by ambulance services, with operational and organisational imperatives taking precedence, as Roger explained:

I just don't see that. [in relation to not seeing precepting as being valued] I see the operation imperative as being the most principle thing. Time to scene, time to job, risk management, decreasing risk, decreasing response times, getting people to hospital, a cost containment. They are kind of the imperatives and there is a view or an attitude that once somebody is qualified, that's it, they're qualified.
(Roger)

Roger's comments refer to organisational performance measures, many of which are in the ambulance service outputs to the Productivity Commission, for inclusion in the annual report on government services (Productivity Commission, 2018). Julie also expressed the view that preceptorship is undervalued; it is simply viewed by employers as a component of a paramedic's job:

The role of the paramedic performing a preceptor mentor thing is probably not well respected... I think in Paramedicine, it's just seen as it's just part of your job and that's what you've got to do. And, that's not seen as a valued role or anything like that, the way I find it, in my opinion... But, yeah -- ambulance services don't value it. It's become one of those expected -- another thing that's expected of a paramedic that you'd think there were qualifications on. (Julie)

Conversely, Brian suggested that the role of a preceptor is recognised as an important one for the profession but it is unsupported:

[Preceptorship] is a resource that is extensively utilised and used, and that it is valued because of its requirements, but I don't think it's provided with the support that it probably deserves. (Brian)

8.2.2 Organisational factors

Participants in this study identified a number of factors that affected their motivation for and capacity to perform the role of the paramedic preceptor. These factors included poor communication between the relevant stakeholders, including the communication to and from ambulance services and universities, and the preceptors themselves.

Participants also highlighted the crewing structure of ambulance services as an organisational factor affecting their capacity to perform the preceptor role.

Previously in chapters 6 and 7, I discussed the problems associated with a lack of communication and training provided to paramedics with regard to their role in working with learners. This lack of communication exacerbates the existing confusion described by participants with regard to what is expected of them when working with learners and served as a de-motivator for the preceptor role, as Samantha explained;

...everyone is pretty negative about it really because they have just, I think a lot of the time because they are underprepared, they don't know what they are supposed to be doing and they are just confused really about what is required and what is the end point for the student. (Samantha)

This was supported by Terry who described his lack of awareness of the expectations regarding a student paramedic allocated to him in the week following his interview:

I've got a new student next week and I haven't received any information about what I am supposed to be supervising, what am I supposed to be leading up to, and [I am] relying on that student to tell me. (Terry)

The lack of organisational communication to preceptors regarding their role and expectations, led to university graduates undertaking an internship being considered as knowing all that they needed to know. Richard discussed a tendency for paramedics to not engage with these learners as they doubted that they had anything to teach them:

Then you've got the people who get the grads coming through and they [paramedics] disengage from them as well, because you know it, "I don't have to teach you anything." So, there's no mentoring for these people. They just get, "Oh, you've come from uni. You must know everything..." (Richard).

This highlights a potential gap in what paramedics understand their role to be, compared with what is expected by the learners, and the education and employment providers. In this example it would appear that the important learning experiences associated with navigating experience-based learning, or learning through clinical exposure, is not being supported by these paramedics. This reinforces the aforementioned need to redefine the language used in paramedicine (see Chapter 5) as well as provide adequate information on what the role entails to guide paramedics on what is expected of them.

In as much as there is a lack of understanding of the role in working with learners from a university background, there is also a perception that learners undertaking the vocational program require more work, which impacts on the motivations of paramedics working with them. Vocational learners are employees of the ambulance service, whereas university learners are full time privately funded students on clinical placement. This affects how the paramedic team operates and what opportunity the paramedic has to work with the learner. Typically, a paramedic team consists of two people in a non-training setting, both of whom would be paramedics. However where a

vocational learner is part of the team, they replace the second paramedic, keeping the team size at two. Where a university learner is on the team however, they are supernumerary resulting in the team being made up of three people (models of crewing are reflected in Figure 8.2). Chris explained the impact of working with vocational learners in practice:

With the brand new probationary [vocational] trainees, they've been good but I find... they involve more work because it is just you and your partner, you and the trainee, and if things aren't done properly then it's all on me and I'll have to step up and do a lot more as compared to if it's a clinical ride-along [university learner], then there's three of us and there's more of us to share the load. (Chris)

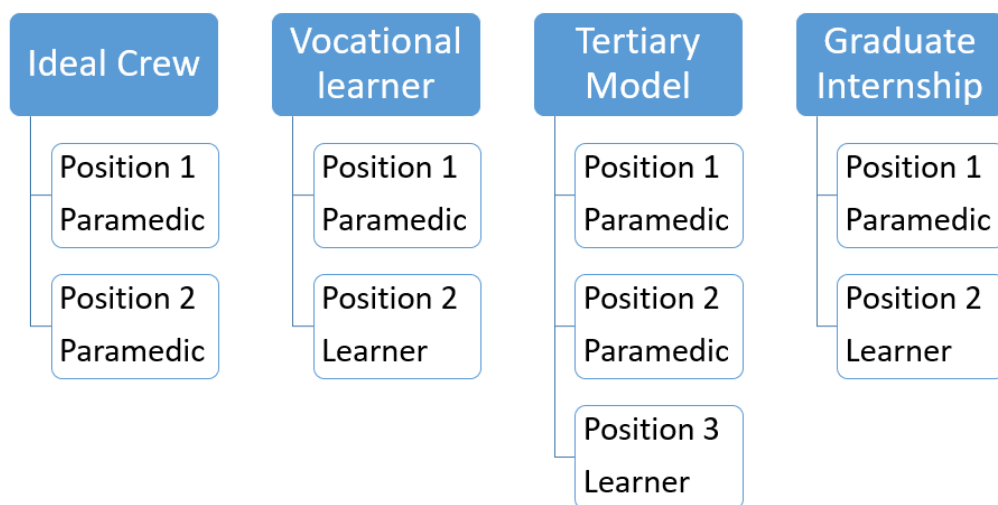


Figure 8.2. Crewing models depending on learner type (Copyright Dale Edwards 2018)

In contrast to the additional workload perceived in having a vocational learner on the team, the graduate intern comes to their position from a university degree and is viewed as less demanding, as Kerrie explained:

the one that's had nothing before [the vocational learner], well they just start to do their questioning they are not looking, they aren't taking into account resp [respiratory] rate, things like that and colour and all those sort of things that you get taught unlike doing a uni degree... all that basic stuff that is actually taught in the university... you know, your patient assessment, all that sort of stuff. So they really haven't got that... I found a bit of a difference there it's just a bit of a load off its not all of the load off because they [University graduates] have not done it in a real setting, but it is just that bit of a load off that you know, they do understand... (Kerrie)

As a researcher with prior and ongoing knowledge of the field, I know that whilst the models of crewing identified in figure 8.2 are common, there are also occasions where due to the demand for preceptors, paramedics find themselves supporting two learners. As reflected in figure 8.3, this occurs when a paramedic is already working with a vocational learner, either a vocational trainee or an intern, and they are also allocated a university student or other learner on a professional experience placement.

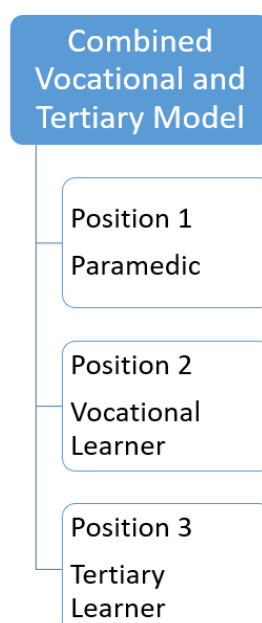


Figure 8.3. Crewing model with two learners. (Copyright Dale Edwards 2018)

8.2.3 Student factors, initiative, affect and engagement.

Unsurprisingly, the learners themselves have a significant impact on how paramedics experience working in the role. Paramedics fulfil a range of non-clinical duties when they are at their ambulance station, including maintaining a state of readiness of their vehicles and equipment. This was raised by participants in the context of orienting learners to the professional culture as well as to the organisation. In the modern tertiary educational environment, it was suggested that university students on professional experience placements resist participation in these tasks. This resistance was presented by participants as a matter of learner initiative, affect and engagement which were all were common points mentioned by participants. This ranged from the predictable elements of a disengaged learner having a negative impact on paramedics through to a highly engaged learner acting to motivate the paramedic working with them.

The presence or absence of initiative and student motivation was described as a factor that affected how paramedics viewed their learners. Kerrie described a situation in which she had given her learner a task to check the ambulance, however in doing so the learner did not take, what to Kerrie was an obvious step, to replace an oxygen cylinder, an empty D size as she described it:

... so they might check the car [the ambulance] but in checking the car they have not changed the empty D size or they haven't umm they checked the car because that was what you told them to do they come back and they say "well this [the Oxygen] is down" and you say "did you replace it" and they say "no"... things like going into a job where

you only have two hands and you grab two kits, but there are four kits to go in, but they don't grab the other kits [laughs] you know... [Kerrie]

Resistance to non-clinical tasks or functions viewed by paramedics as an element of their professional identity can not only affect the relationship between the learner and the paramedic(s) they are working with, but can also affect future professional experience placements, or potentially internships in the case of university students.

Paul described an event that had occurred in a different region in his state; in this incident the university student was known to Paul and had subsequently undertaken a placement in his region:

[the crew] went out to wash the truck and they said [to their student] "come on, it is end of shift let's go wash the truck" and he [the student] said "that's not my role, I am not here for that" so I know that that crew just shut down, he got no further apart from just tick the box, where if a student is keen and they show initiative, within their skill level, people are really keen to help them along. (Paul)

This lead Paul to provide further commentary on his perspective on why university students were there; why they were studying paramedicine and what their motivations were:

my first impression is their umm, not initiative, but their keenness on the industry, you know if someone came up and said "yeah I am doing this because I couldn't get into such and such", you know I am thinking "well this is my first choice" you know, I respect people that see it as their first choice too, but knowing that the new, latest generation... They start a uni course and that might not be the one that they finish with. (Paul)

The phenomenon of learners' resistance to non-clinical tasks was not limited to university students; Richard outlined an example of a vocational learner objecting to non-clinical tasks. The manner in which Richard described his discussion with a learner on this point highlights his frustration and the irritation he felt towards the learner when he asked them to help wash the ambulance:

"No, that's not my job. They didn't teach us that at [the education centre]. I'm not doing that. I'm not cleaning the truck. We didn't get that listed on my skills. That's not in my skills book. I don't do that."...

And, I said, "Yes, you do. We all do. We all clean the truck. In fact, we all mop the floors in the bathrooms as well and we change the toilet roll and we'll do that. We all live together and we have to share this environment." [to which Richard suggested the learner responded]

"No, not doing it - not doing it - not my job."... and, I said, "So, when we get to a job and you have to wipe the person's bottom because they've got faeces all over them, what are you going to do then?"

[learner] *"I'm not going to do it."* [Richard] *"So, you have to have skill [skill / competency sheet] in everything we do? We have to have skill to breathe? We have to have the skill for you to open the door to come into the station? Do we have to have the skill for you to walk in and sit down on the couch? Do we have to have the skill for you to go and get a cup of tea and watch the tellie? Do we need the skill for every single thing for you? No? Is that how your life is? If you don't want to be on the job, leave now. Goodbye, you know? Don't be here. That's part of the job."* (Richard)

This type of experience reported by paramedics extended beyond the resistance to participating in or performing non-clinical tasks, to such things as how learners engaged with the paramedics overall, and how they engaged with learning activities during 'down time' between cases. Samantha explained:

...it is difficult to work with them and difficult to get the point across, to get them engaged... because some of them won't talk which is a pain... so I think that is something you need to really be aware of the type of person because everyone is different, and you sort of need to put aside any preconceived ideas and try different methods to get through to them really you know working as a team... The negative ones are like the previously mentioned, just not talking, they go and sit in the corner and do their study, weren't interested in doing... whiteboard scenarios or real scenarios or anything like that, just disengaged, moody and just generally difficult to deal with.

(Samantha)

These types of learners, whether they are disinterested, disengaged, overconfident or shy and unable to bridge the communication gap, results in the paramedics working with them disengaging as well, as Terry and Paul explained.

it's always driven by the student as well. A lot of the mentors will say "if student doesn't come to me and tell me what they want I'm not doing anything". There's a lot of that and you get a lot of students who don't. (Terry)

[if students] ask lots of questions I will answer them, if they show no interest then the interest tends to dwindle off a bit with me as well.

(Paul)

It is important to highlight, however, that while participants reported difficulty engaging with learners, they also reported positive experiences with highly motivated and engaged learners as Kerrie described:

...but on the other side, we have had some great probationers / trainees come through that I have had the pleasure of working with, uni grads they have been great, they are fun, young, keen interacted well with everyone on the station. (Kerrie)

While participants highlighted the potential de-motivating aspects of working with learners that are not engaged, they also emphasised the positive impact of working with learners that are engaged and have a degree of enthusiasm for paramedicine has on them. As Richard explained, learners like these serve to improve their motivation as well as performance in working with learners:

...so if it was a good level of engagement and enthusiasm, I loved it, it was great, I was enthusiastic myself. Helped me be a better preceptor. But when there wasn't that, it sort of disappointed me as well.

(Richard)

8.2.4 Clinical and operational factors

As discussed previously paramedic preceptors are required to have two sets of capabilities to operate in their profession, they need to be a capable paramedic to deliver the best care to their patients and to be a capable preceptor to enable the learner to progress. This translates into a duality of purpose when working with

learners; while they have a responsibility to support the learner, their primary responsibility is to the patient and their needs. Participants in this study reported this as an important factor in the performance of their role in working with learners from several different perspectives. These included knowing what level a learner is at, or allowed to practice at; making a decision on 'how much room' you give a learner in their clinical practice before intervening; recognising the need to intervene where it appears the learner is moving toward an error in clinical practice; and taking over clinical care without allowing the learner to practice where the clinical severity of the patient precludes learner involvement.

Participants reported concerns that they often do not have, or are not provided with a clear indication of where the learner is in the clinical scope of their education and therefore what the learner can or cannot do. These concerns align with prior commentary (see Chapter 7, Section 7.2.3) on the lack of opportunity to meet with and plan with the learner or coordinating educators prior to the learners' arrival for shift. Managing the overall expectations of the learner was reported to be a challenge to paramedics, as Simon explained.

I know the students want to do everything, but they don't know how to do it, but there are legal or ethical issues associated. (Simon)

Julie provided further clarification on the need to have a degree of planning and prior information on what the level of clinical scope will be for the learner and what the expectations are:

if I knew I was getting, for example, a level one [vocational learner] coming out on road with me, I would make sure I knew what they were learning... so we could focus on those things and developing those skills at their level, rather than raving on about things like colloid

osmotic pressure and complicated things that they're not at that stage... (Julie)

Participants demonstrated an appreciation of the value in meeting with their learners, planning and setting boundaries for scope, role and communications strategies as Tanya explained:

I think it's really important to sit down and talk with someone of what, how are we going to do this, what do you want to get out of it so you just, you know where you're at and there's no, like anything unexpected that one of you might have been hoping the other one would do or say and then things don't happen, then you get awkward. (Tanya)

The opportunity to plan with a learner prior to, or on their arrival for their shift, was inconsistent across participants however. Ira outlined past experiences when working with learners undertaking the ICP course in his ambulance service where he was able to plan out the objectives for the period he was working with the learner:

when I had an intensive care trainee, I'd sit down, I'd look at all of our core clinical guidelines, all of our skills that go into being an intensive care paramedic, divvy them up in some sort of logical way over the 14 weeks or the 9 weeks or the 10 weeks that I had with the person... (Ira)

Of note, however, is that what Ira described is not necessarily aligned to where the learner was in their course, but simply a breakdown of the overall scope of a qualified ICP. Of additional note is that it still fell to Ira to plan this element of curriculum, rather than it being a structured element in the professional experience placement, supported with resources.

Roger reported that in his experience the capacity for this level of planning is a factor that improves the experiences of paramedics working with learners, potentially impacting on their willingness to undertake the role:

the best experience is not a particular instance but a period of time that I was mentoring where I felt that I knew what they needed to do, I had a clear vision of what they needed and I had some clear goals...

(Roger)

Planning of this nature provides the space for the paramedic and learner to get to know each other, setting the foundations for a positive working relationship. Participants consistently reported their desire for a positive relationship with their learner, as Richard explained:

you need to have also individual connections with people... Getting to know the person if you can - it's always good to get to know the people because then you realize you get some personal connection and you get that buy in. (Richard)

Interestingly there is a small degree of inconsistency in the data on the point of making connections with and meeting the learner. Roger described more recent experiences in his career in which he has found a greater degree of structure in this regard:

Ordinarily when you go into a mentoring situation you have a meeting with the clinical support officer and you sit down and you're given a learning package. This came in sort of the latter half of my career, before that it was a little less structured but generally speaking what happens now is you will sit down with a document that says here are the learning outcomes, here is some examples of how we want you to

go about it and here is the structure about it so there is a little bit of a frame work given there and we will sit down and discuss it with the clinical support officer. (Roger)

Roger's experience is not necessarily one shared by some other participants including those from the same local area as Roger, indicating a level of inconsistency in the data.

What the preceptor decides to allow the learner to do in dealing with patient care reflects the dual function of paramedics in taking both the responsibility for the patient and the learner. The preceptor is often faced with three possible options: deciding when to intervene and provide guidance; deciding when to take over completely; and deciding when to exclude the learner from the delivery of care, all of which are based around the needs of the patient. Participants spoke in detail about the need to decide when to step in and provide guidance or take over care. What is evident in the data was the lack of a clear understanding or basis for making these decisions. Newer paramedics exhibited greater variability in their decision making, with some being willing to give more room for error than others, and it was noted that paramedics gained increased confidence in making such decisions as their experience grew.

Chris was one of the less experienced paramedics in this study, with three and a half years' experience in the profession; he outlined how over time he has changed his approach to intervening in the clinical care being provided by a learner:

I think when I first started, I gave them a lot of trust that they can handle... things, because I generally like to... let them try and do things their own way just to see how they go... I think that now... I'm more aware of... where things can go wrong so I recognize where they're in trouble a lot earlier whereas before I was sort of just assuming that

they've got it... so I stepped in later when I first started working with students. Then now, I'll step in a lot earlier... (Chris)

Conversely, Samantha reflected that people with more experience are less likely to step in and intervene than those with less experience:

[with experience] you can stand back more and sort of not let them drown but let them sink a little to gain that experience whereas sort of I think people that have got minimal experience would probably jump in sooner because they don't see the sort of clinical pattern that a more experienced person would see. (Samantha)

My own experiences and observations as a paramedic align with Samantha's comment, in that there is a tendency for more experienced paramedics to stand back and give the learner more room. As has been discussed in chapters 6 and 7, in order to perform the role effectively, there is a need for paramedic preceptors to have experience and confidence as a paramedic which brings with it a greater confidence in being able to intervene where required without overriding the learning opportunity.

Beyond the intervention to re-direct care and guide the learner, there is also the occasion where the learner may make clinical decisions that are not in the best interest of the patient. It is at this time that the paramedic preceptor needs to step in rather than guide, and take over the clinical care of the patient. Tracy provided an example of this experience:

on one occasion he [the learner] took some aspirin out of the bag for a query CVA [stroke] patient, for their headache and went to administer it and I said "I think we will have a think about what our course of action is going to be we will just do a few more checks" and started to

try and take over to engage the patient in a different manner rather than cut him down in front of the patient and he said "I have already decided my course of action, this is what we are going to do" so at that point I had to say "excuse me we are just going to grab a few things out of the ambulance" I said that to the patient and then persuaded him to leave the house come outside with me and unfortunately had to say "look we are going to stop this now, it is not the course of action we are going to take, because it is inappropriate management and you need to consult together before we do things like that" so then I had to go back in and take over. (Tracy)

Participants reported a need to restrict the exposure of the learner in clinical care, due to either the clinical acuity of the patient, or the capacity of the learner to contribute at the level required. Given the degree of evidence in the data from this study that paramedics often do not know the level of the learner at the outset of the professional experience placement, it is reasonable to propose that the learner may be removed from, or prevented from, delivering care more often than is needed. Lisa explained the prioritisation of clinical care, whilst also outlining how there may still be some learning opportunities for the learner:

Sometimes when all your brain is focused on doing the clinical tasks because the person that you're with can't do them, the preceptor role gets put on the backburner... Sometimes you can do both. Sometimes you get that little snapshot of time where you can say, "let's look at what's going on here." But clinical care has to come first... I'm not going to let someone who doesn't know what they're doing kill someone so I can teach them...(Lisa)

8.2.5 Communication and conflict resolution

Participants also highlighted a number of factors that affect their performance of the role that are closely linked to communication and conflict resolution skills. It could be argued that many of the factors raised in Section 8.2.3 above can also be linked to inadequate communication skills. In this section I will analyse categories in the data that reflect a gap in communication skills.

Participants commented on a number of occasions of the challenges in working with learners they classified as *difficult*, which participants commonly put down to personality traits in the learner, which they are not well prepared for. Brian explained:

...the problem comes when the student is of a personality that is different or difficult and you need to provide some negative feedback to these people or constructive feedback really because often it is not really negative, because you are not trying to be negative, you are trying to be constructive, you are trying to help them and assist... but when you have to have the difficult conversations or when you have problems like difficult students then I would say not prepared at all for that. (Brian)

As Brian explained further, it is possible to develop the skills required to communicate with these learners over time and with experience in the role. He noted, however, that the lack of preparatory education for the preceptor role and hence absence of 'pre-loaded' communication skills specific to preceptorship, is less than ideal for working with learners earlier in a paramedic's career:

...also you develop better techniques to deal with those individuals that are difficult, or have a personality that makes them challenging to provide constructive feedback to, so you are less likely to get into the

situation where the student basically stamps their foot and walks away from you saying "I am not happy with the information you have given me". You are able to identify these personalities a lot easier and then you can apply techniques that provide somewhat of a better environment and mitigate some of those issues that you would have probably had earlier on [in your career]...

Communication with a learner who has been deemed by their preceptor as difficult was also reported in the context of communicating in challenging situations, such as times where there is a critical clinical presentation; for example, clinical error or a critically ill patient. Participant responses on this topic highlighted that the common action for paramedics is to exclude the learner from further clinical interventions in that clinical case. William provided an example of a case in which the learner he was working with wanted to administer a drug to a patient that was not clinically indicated for the patient they were presented with. He outlined that after the learner did not accept the advice he gave not to administer the drug, it became necessary to remove them from the ambulance:

I sort of lost my temper and removed him from the back of the vehicle because he was adamant he was going to give this patient [the drug]... it was just belligerence on his part that he was going to do what he thought was in the patients best interests regardless of any other comment or discussion... the student was relatively well regarded as a poor performer. (William)

The removal of learners from the provision of clinical care such as was the case in William's example, is often the only option open to preceptors. As can be seen in crewing models outlined in Figure 8.2, where the crew is either a vocational or graduate

intern there is no option in the absence of an alternative paramedic resource. Such actions do, however, as was the case in William's example, run the risk of creating a conflict situation.

Participants reported that a central function of their role in working with learners was the provision of feedback on learner performance; communication skills are clearly a necessity in performing this function. The data in this study show that even though the provision of feedback is an important function, paramedics find this task difficult, particularly in the provision of constructive feedback, as Samantha explained:

giving constructive feedback... no one wants to do that, it is really quite difficult, and I think just with experience you learn how to approach things in a way that won't upset people. (Samantha)

The challenges in giving feedback can be exacerbated in cases where the learner is confident, or overconfident in their own knowledge and ability, as Darren described:

The worst experience I've had is with the kind of personality I find most frustrating. It's those people who feel like they don't have much to learn so they are closed, they feel as if their point or amount of knowledge or understanding isn't enough to get through and that they probably think that they understand things better than they actually do. So if you're closed minded that it's very, very hard to teach. (Darren)

Tanya explained how this can also be a factor dictated by where the learner is in their education, in the context of both interns and vocational student paramedics. There will come a time when the paramedic's role is to act more like a mentor than a teacher and assessor, to aid the learner in their final transition to independence. However, it is also

at this time that the learner may be at their most confident, making them potentially less receptive to feedback on changes to practice:

I was pretty much ticking him off like now he's free to go without any help from me. It was really hard because there was no huge gaps in what he was doing but just a lot of little loose ends. It was just really hard for me to figure out how to make him listen because he was quite focussed on all the good things he was doing, which is fine, but I was trying to put the little compliment sandwich together and say "this is really good and this is really good but we can try and make this part better" but he would always be waiting for me to say something good and a couple of times he would say "I was waiting for you to say something good" and I was thinking "well I'm not here just to make you feel good, I'm here to make you better." (Tanya)

Participants in this study reported the challenges they sometimes face when the quality of communication is impacted by the learner's personality or a clash of personalities, as Lisa and Tracey suggested:

There's all different kinds of personalities not everybody gets along. And suddenly you're just rostered with someone, and you're in charge of their training for the next x amount of weeks or months (Lisa)

there are occasions where you have that personality clash where you just can't strike up a comfortable rapport and that can definitely have an effect, it is just, everything feels a little clumsy, whereas with other people you get to a stage where they start to seek your feedback

because they are comfortable with the discussions that we are having, those people where it has only happened a couple of times but where you just can't seem to strike accord together that often causes a problem because it feels like everything you have tried to deliver be it positive feedback or constructive feedback on something that was done, it just seems that it seems to happen in a clumsy way and just serves to increase that gap between you. (Tracey)

Beyond the decisions on what to allow the learner to do in the context of when to intervene or take over, the isolation faced by paramedics and lack of immediate support places them in a position where they will need to get their learner to undertake functions they may not be permitted to take. For example, for safety reasons some ambulance services restrict the approval to drive an ambulance to learners that have had some degree of experience or training in driving, however as Julie outlined, there are times where the patient need outweighs this:

I was put in a situation where my service... did not adequately prepare me... I was left with a trainee on their first day she had to end up driving the car [ambulance] and she wasn't allowed to drive because you've got to be working six weeks driving and having a practice before you're allowed to drive an ambulance as a new, very new, trainee. So, I needed her to drive and there was no time for me to be gentle and mentor her through this whole situation, because I had a patient dying in the back. That was horrible that the service left me unprepared and sent me someone even less prepared. Then, I was expected to just deal with it and cope with it -- unprepared in many

ways... I was a brand new officer as well... I was angry after that.

(Julie)

8.2.6 Fatigue and occupational stress

Throughout this study a recurring theme in the data has been the lack of choice paramedics have in working with a learner. This has been discussed in previously (see Chapter 6) with regard to suitability and willingness to work with learners and the potential negative flow on effect this has on learner experience as well as the paramedics themselves. In this section, the growing demand on paramedics to work with learners will be analysed in association with both the number and types of learners paramedics support, and the resulting role fatigue paramedics may experience in working with learners.

As discussed, paramedics are required to work with a wide range of learners including learners within their own profession, ranging from entry level vocational or tertiary learners, through to post qualification learners such as paramedics returning from work or undertaking other extension courses. Paramedics are also required to work with and support learners from a range of health disciplines and courses. The types of learners that participants in this study reported working with are listed in Table 8.1 .

Table 8.1 Variety of learners placed with paramedics

Professional Origin	Type of Learner
Paramedicine	Vocational student paramedics (often referred to as trainee or probationer)
	University undergraduate students on placement
	Paramedic interns
	Intensive Care Paramedic students
	Paramedic rescue trainees(road and high angle rescue)
	Volunteer Ambulance Officers
	Qualified paramedics on a return to work program
Nursing	Undergraduate (RN) nursing students on placement
	Enrolled nursing students on placement
Pharmacy	University undergraduate Pharmacy students on placement
Medicine	Undergraduate Medical students on placement

In addition to those learner groups in Table 8.1 paramedics also have members of the medical branches of the three Australian Defence Forces (Army, Navy and Air Force) placed with them for clinical experience. Each of these learner groups will have different expectations and goals from their placement as well as difference knowledge and skill sets, unique to their own field of study, to be developed during their time with

their paramedic. Tony described this variation in expectations as well as readiness for placement:

They come with a variety of readiness and a variety of expectations to what the job entails. Some of them seem ready to go, like they could start tomorrow and some need a bit more coaxing into the job and just gradually getting different aspects and exposed to even to the basics slowly. (Tony)

Given the lack of preparatory information highlighted by participants in chapters six and seven and the lack of a selection process identified in Section 6.2.4, it is of concern that in many cases the same paramedic will be required to work with each of these different types of learners, each with their own distinct needs and educational priorities.

Samantha explained that the range of learners she is placed with reflect a broad range of learner types:

I have had varying levels of students, I have had first day on the job graduate students, so interns, I have never had a first day apprentice model student because by the time I qualified I don't think we had any of those. I have also had like problem students at various levels either through the intern program or through the apprentice model, I have worked with ICP students, I generally sort of end up... with those students to fix up any problems that they have or just top consolidate everything with them, that is generally the type of student I end up with, oh and just the ICP students and I usually get them just before qualifications too. (Samantha)

In addition to the wide range of learners identified, due to the high volume of learners participants also reported there is an increasing demand placed upon them to have a

learner. This increased demand results in many paramedics being required to work with learners either continuously or near continuously. Brian reflected on this, describing the volume of learners he has worked with in the two and a half years since qualifying as a paramedic:

I would've had about three or four probationers that are fresh out, like what we call level one trainees. That would be vocational entry students, so paramedics, so they will have eight weeks training from Rozelle headquarters and then after that they get on-road probationary period for nine months and I would've had three or four of those probationary trainees. And then student ride-alongs, I would've had about maybe three as well. And then interns, probably maybe like five or six. Something like that. [Brian has only been qualified for 2.5 years + 1 year internship]

This degree of exposure to learners was consistently reported across the participants in longer serving paramedics as well as early career paramedics, as reflected in Ira's comments:

I spent the best part of five years basically continuously training new students, and then after becoming an intensive care paramedic, you know I had some experience in training intensive care paramedics, and I've also found myself needed from time to time trying to assist people who had been identified as truly struggling within the organisation within ambulance as a student. Really not-- not really meeting any of the targets required of a student. These are the sort of people that you know, ultimately lose their employment. (Ira)

Without the capacity to opt out of the preceptor role, and in the absence of suitable recognition for the role, the ongoing demand to work with learners can have a fatiguing effect on the paramedics. They find themselves wanting relief from the preceptor role, and where that relief is not available to them, there is a concern that the level of support they are able to provide to the learner is less than ideal. Roger discussed his fluctuating motivation in working with learners depending on his own fatigue:

I was quite motivated with this bunch of students but the next lot I couldn't be bothered I just wanted to do my job and I didn't want to do any mentoring, I wanted a break but then I was rostered in. So I have these peaks and drops in terms of, and others would too, in terms of motivation, preparedness and whatever so on one set of students I'm more motivated and put in a lot of work and do well and the next lot I was kind of a bit tired and just wanted to do my job on road and it was much more lack lust and a bit half-hearted so the quality of the delivery was a lot more varied. (Roger)

As Tony previously reported (Section 6.2.4), it sometimes seems like continuous placement with students is an unintended punishment for being good as a paramedic. However even good paramedics are not without flaws, and are subject to the fluctuating levels of performance any person might reasonably experience, as William indicated:

even good preceptors aren't necessarily good at it all the time, things like fatigue can play a big role in your ability to perform the role umm one thing that I have noticed is poor performing students or staff often get put with preceptors, specific preceptors who are recognised as

being good mentors umm and that wears them down dramatically.

(William)

There is a clear impact on paramedic fatigue that needs to be recognised and accommodated by ambulance services, providing a capacity to rotate paramedics into and out of the preceptor role to allow them to have a break, as Tanya suggested:

So I've actually been looking forward to time off from being a mentor

because its more draining when you're mentoring someone as work

than if you're not, simple as that. (Tanya)

Rotation into and out of the preceptor role would also enable preceptors to re-establish their own performance, through a period of respite from the demands of performing both the paramedic and preceptor capabilities. Through periods of respite from the dual capabilities of the paramedic preceptor, paramedics would be able to consolidate their own practice as paramedics, William explains:

...the preceptors need a break from doing it, they can't be expected to

be able to perform at that level as well as... maintain their own clinical

level without some sort of break from the preceptor role. (William)

As discussed in Section 8.2.4 the paramedic role in itself has been recognised in the literature for some time as a high stress occupation. The stress already facing paramedics is amplified when placing greater demands upon them, such as the demand to work with learners who are at a lower clinical level, as Kerrie explained:

[working with learners] really puts the pressure on you whereas when

you are working with someone on the same level you, [you] just click

and you just know what needs to be done. (Kerrie)

Kerrie further explained that this is not limited to entry level learners such as vocational trainees or university students on placement, but can be a significant factor when working with paramedics undertaking a re-training period due to returning to service:

I just got to the stage where I was that stressed out, especially after having a job where the patient rapidly deteriorated, and I am just going, "we have got to go , we have got to go" and they just weren't moving, and they were someone that had 20 years in the job, they should have been moving, and... I just thought I can't get another big job, I can't get a prang on the highway with this person, I can't get a cardiac arrest with this person, I just can't cope.

The degree of stress associated with being a preceptor, along with the severity and unpredictability of clinical practice in paramedicine can have a significant impact, even at the highest levels of workplace learning, intensive care paramedicine, where it is likely the paramedics working with learners have a high degree of clinical experience. William described a critical incident when working with an ICP student, when the student became significantly impacted by the clinical experience. This incident demonstrates the extremes of clinical practice under which paramedics must support learners:

[We were] ...managing a toddler who was struck by a car, when we arrived the patient was in cardiac arrest... umm the car that had hit the patient had departed the scene.. and ummm I managed the patient's airway, the student that I was with provided IO [intra-osseous] access and got some drugs going etc. and umm on the way to hospital which was I think about 10 minutes away, he was crying in the back of the truck because he had a child the same age and umm

the patient was managed well, the child had output on arrival at hospital but was later pronounced deceased and the life support mechanisms were switched off. Umm that ICP student was very grateful for the way that job was managed and the support that he received based on his emotional state at the time from myself...

(William)

When asked how well prepared he felt for that type of experience, William responded that he had not received any education for this type of situation:

...the preparation I think came from my own values and my own communication skills etc. that weren't part of any formal education process received. (William)

Due to the nature of the crewing within the paramedic clinical environment where there may be no other support or staff around them, paramedics find themselves in the unique position of having a clinical care priority as well as a potentially vulnerable learner. This is a point of difference compared to most other health professions as they typically work in health centres, hospitals or surgeries where the learner can be assisted and supported by other staff, and potentially removed from the situation if unduly affected. In a two-person ambulance crew, this is not as easily achieved, suggesting an area of education and development need in any preceptor preparatory course or professional learning.

The volume and diversity of learners are not the only contributors to stress for paramedics working with learners. The absence of the ability to opt in or out of having a learner, coupled with the reality of life outside the ambulance service and day to day life experiences such as marital problems, illness, parenting and so on combine to contribute to increased risk of stress for paramedics. These factors also contribute to

the quality of work they are producing and again the resulting learner experience.

Charles described how this contributed to his experiences in the past:

...I was going through somewhat difficult personal stuff with marriage breakdown I came back to work one day and turned up and there was a trainee on the doorstep... That was partially my own fault for not... getting in contact with management and saying I can't do this so I just sucked it up and did it and I still to this day feel that guy - he's still in the job and training at the job but I don't think he got the best of my training for a while it was a bit difficult. (Charles)

Whilst Charles indicated that he may have been able to contact his manager and opt out of having that trainee, the absence of consultation prior to being allocated the learner contributed to his experience as well as the experience of his trainee.

In summary to this section, the growth in demand for paramedics working with learners, inability for paramedics to easily opt in or out of working with learners, and the resulting near continuous presence of learners creates a fatiguing and stressful experience for paramedics. There are days when paramedics might need to rely on the presence of another qualified paramedic to get through the requirements of daily clinical practice, however as Kerrie explained, in the current system this is often not possible:

I have got to be on the top of my game instead of relying on my partner, which, you know some days you just have bad days and you think "oh well at least I am working with x or y and you know there is not going to be anything that is going to happen that we won't be able to muddle through" but when you are it, and that's what you are with a student, you are it, that's a different ball game. Totally different

ball game, especially if you are not in the mood for it, you know.

(Kerrie)

8.3 Discussion

The findings in Section 8.2 will be grouped here for discussion based on those factors that affect motivation to perform the preceptor role, and those factors that are linked to role design. These components combine to impact on the role performance theory of paramedic preceptorship primarily in the areas of expectation (plot) and support and feedback (performance review).

8.3.1 Motivating preceptors

Participants in this study provided only two examples of existing extrinsic rewards for performing the role of paramedic preceptor, those being financial reward or provision of CPD points. Participants did suggest there was room for additional reward options to motivate paramedics to take on the preceptor role, however they were unable to provide clarity regarding what these rewards might look like, beyond the concept of recognition. The issue of extrinsic rewards and incentives for preceptorship has been discussed widely in nursing (Campbell & Hawkins, 2007; Henderson & Eaton, 2013; Webb, Lopez, & Guarino, 2015), with rewards and incentives including such things as; credit toward recertification; program information (for the program being undertaken by the learner); remuneration; access to university resources; professional affiliation with the university; formal recognition; and gifts or other rewards (Webb et al., 2015). These examples provide a range of options that the paramedicine industry, profession and education providers should consider in regards increasing the motivation of paramedics for recruitment into the preceptor role.

One's behaviour and performance in a role can be directly linked to confidence in the skills and knowledge associated with the role (Thibodeau & Hawkins, 1994).

Confidence, or self-efficacy, as a paramedic was discussed in chapter 7 in relation to a potential explanation for resistance to the preceptor role. In the context of paramedic preceptors, this confidence or self-efficacy needs to be considered in relation to both roles, that of the paramedic and that of the preceptor. The findings of this study indicate that preceptors need to have experience and confidence in clinical practice, however this alone is not sufficient; being a good paramedic does not assure capability as a preceptor. Having said this, having a high level of self-efficacy, or what Eccles (2009) terms "self-related beliefs" (p. 84) in one's competencies has a substantial influence on choice to take on a given set of behaviours, or a role in this case. When considering motivators for the role of paramedic preceptor, therefore, confidence itself will motivate paramedics in performing the role. Returning to the discussion of formal education for the preceptor role however, also discussed in chapter 7, training and education for preceptors (or mentors in other disciplines) has been shown to improve confidence (Feldman et al., 2012; Lau et al., 2016). The converse is also true, in that low confidence resulting from a lack of training and continuing education will demotivate preceptors.

8.3.2 The Learner as a motivational source

The theories of motivation have been debated in the literature for decades. In the context of motivation in organisations a recent concept that can be applied here in my research is Pro-Social Motivation (PSM). Where motivation is defined as a "desire or willingness to do something" (*Motivation definition and meaning | Oxford Dictionary*, 2018) and pro-social is defined as "Relating to or denoting behaviour which is positive, helpful, and intended to promote social acceptance and friendship" (*Prosocial*

definition and meaning | Oxford Dictionary, 2018), PSM is therefore the desire to have a positive influence on others (Grant, 2007).

An interested, confident preceptor motivated to perform the role is likely to have successful experiences with their learner. As outlined in Section 8.2.1, success, and seeing the resulting success of their learner is reported by participants as a motivator for performing the role. Achievement or success in a role is well recognised as a motivator in role performance whilst at the same time lack of success, or the lack of evidence of success through a lack of feedback serves to negatively impact on self-efficacy (Shim & Ryan, 2005).

8.3.3 Organisational and role design to enable preceptors

Sections 8.3.1 and 8.3.2 focussed on the specifics of motivation for the preceptor role mentioned in Section 8.2. The remainder of Section 8.2 addressed matters associated directly or indirectly with organisational design, with participants raising concerns regarding crewing, clinical priorities, communication and fatigue. Grant (2007) argued that job design is a significant factor in generating PSM. Throughout this thesis the lack of role design and definition has emerged as a challenge to preceptors being adequately prepared for their role, and this chapter has highlighted a lack of organisational design as a further challenge.

As paramedics graduate from their paramedic degree and gain employment as an intern, they commence a process of role transition. Role transition involves a change in expectations, abilities or relationships and the incorporation of new knowledge and / or altering behaviour (Meleis, 1975). Paramedics undergo a number of role transitions, from university or vocational student to intern; from intern to qualified paramedic; and potentially from paramedic to ICP. This study has demonstrated that at the same time as paramedics are acclimatising to a role transition from intern to paramedic and the

capabilities associated with that role, they are often also experiencing a role transition into a preceptor role and the additional capabilities required of that role. The following sections will address two elements of role design within ambulance services that will aid the paramedic preceptor in addressing expectations and enable a smoother transition to the preceptor role.

8.3.3.2 Planning the learning experience and communicating with learners.

The need to know what is expected of them as preceptors was a clear issue for participants in this study. Participants reported getting a learner with little or often no warning, and with little or no briefing on their expectations. As outlined previously (see Table 8.1) the preceptor may find themselves working with a range of different learners, with unique demands associated with their specific educational program, or their level within that program. In a study of student perceptions of paramedic practice educators in the United Kingdom, Lane (2014) found that practice educators needed to have an understanding of the student's educational program. As is the case with many studies on paramedic education, however, Lane's study was undertaken from the perspective of the learner not the paramedic.

Symbolic interactionists would argue that meeting the learner prior to the learning experience is important as it allows the learner and the paramedic to explore expectations and responsibilities and establish agreed meanings (Carlson, 2013). In effect this constitutes the point at which role taking and role making occurs.

Participants in this research described past experiences of being unaware that they have been allocated a student or if they are aware, they described a lack of opportunity to meet with and plan their time with the learner. Given the lack of opportunity for paramedics and learners to establish shared meanings their capacity to understand and undertake their individual roles in the relationship is potentially impaired. The value of

an initial meeting with learners and the development of a plan for the learning experience is well recognised in medical education (Challis, 2000; Deane & Murphy, 2015; Kavitha, Bhardwaj, Gupta, & Ibrahim, 2015). Meeting with the learner allows the paramedic preceptor to become familiar with the areas of focus for this particular learning experience, as well as develop a shared understanding of expectations, for both the preceptor and the learner. The evidence provided in my study regarding the lack of opportunity to plan with learners, confirms the work of O'Meara, Williams, et al. (2014) who also reported paramedics being allocated learners without warning or time to plan.

In the context of the actor analogy for role performance the opportunity to meet with your learner allows for a communication of the plot and the ability to set the scene. At the same time the preceptor becomes aware of the needs of the learner and the learner becomes aware of the opportunities and limitations in the placement. It is therefore imperative that employers and education providers establish a strategy for meetings such as this to occur prior to the commencement of the learning experience.

Working in the field of paramedicine can be quite stressful (LeBlanc et al., 2012; Regehr & LeBlanc, 2017) and performing the role of supporting learners can add to that stress, as has been outlined in Section 8.2.6. Given this stressful environment and the need to provide feedback to learners on their performance, it is inevitable that conflict will occasionally arise. Managing conflict is again an area affected by the level of communication skills paramedics hold, which the data in this study suggest to be inadequate in the paramedic workforce. Section 8.2.5 presented an analysis of the data associated with conflict in the preceptor relationship, I propose that much of the issues raised would be addressed through the conduct of planning sessions as outlined here. It is important to also reflect back to chapter seven, however, and the commentary on

the absence of training for paramedic preceptors. This absence of training includes a lack of training on communication skills in a hierarchical partnership such as is seen in preceptorship. Paramedics receive education on communication as part of their paramedic capability set (Shields & Flin, 2012), however there is no evidence of communication training for what could be described as their preceptor capability set. Indeed, the skills, abilities, behaviours and beliefs that make up this preceptor capability set are yet to be formally identified.

8.3.3.3 Workload management

The crewing models within which paramedics operate have a direct impact on the preceptor experience. As outlined in Section 8.2 the paramedic normally works as part of a two-person crew, however, where a university student is on placement the crew size increases to three people. Participants identified challenges associated with times in which they have a university student and a vocational learner at the same time (see Figure 8.3). Learner to preceptor ratios vary across the health professions, with models incorporating ratios of anywhere from 1:1 through to 1:2 or more, depending on the field of practice (Loewen et al., 2017). The ratio of two learners to one preceptor has been identified as optimal for maximising the value of preceptorship and enabling peer learning to occur (Loewen et al., 2017).

In a commentary on the article by Loewen and colleagues (2017), Pront and Gillham (2017) suggested that there is a need to develop preceptor (or in their case clinical supervisor) expertise in order to provide a skill set that can allow preceptors to navigate the challenges created by having more than one learner. One such challenge in the paramedic environment associated with precepting two learners, as described in Section 8.2.2, involves two learners in different educational programs, with different requirements, and at different levels of academic achievement. However as has been

clear throughout the data in this study, there is currently no program to develop skills and expertise in preceptors for one on one preceptorship, let alone two to one preceptorship, leaving paramedics vulnerable when working in this capacity.

8.4 Chapter summary

Chapter eight has presented an analysis of the data relating to the experiences of paramedic when performing their role as preceptors. The majority of the experiences presented in this chapter relate to the motivating or demotivating aspects of the role, and challenges associated with role performance in an unsupportive environment in the absence of education and training to perform that role. Therefore this chapter reinforces the findings reported in chapters 5, 6 and 7 in which it is identified three key things: that there is a need for paramedic preceptors to have their role made more explicit to all stakeholders; that a selection process be determined and applied to ensure the paramedics with the dual capabilities of paramedic and preceptor are occupying this role; and a need for the provision of education and training.

Furthermore, I have reported that with a supportive working environment and creation of a system in which preceptors are able to better communicate with their learners during preparatory meetings, much of the negative experiences reported here by preceptors could be avoided or managed more efficiently. Chapter 9 will continue the analysis of the data with regard to the recommendations of participants in this study on how to improve the preceptorship experience.

Chapter Nine – Need for change

9.1 Introduction

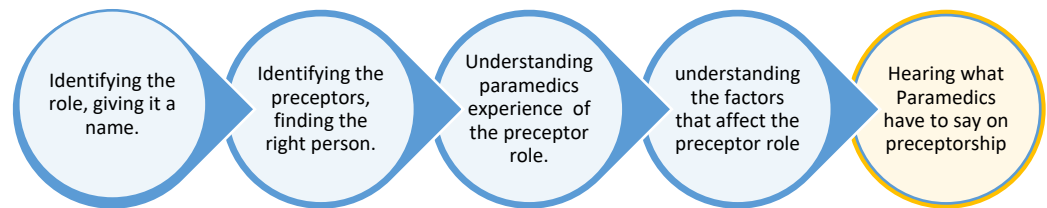


Figure 9.1. Analysis stage 5 – Hearing what paramedics have to say

Throughout the first four findings chapters I have outlined the factors that affect the performance of paramedics working with learners, their suitability for the role and their level of preparation as preceptors. In this chapter I draw these findings together and discuss, in particular, my participants’ responses to the final interview question, which asked them to identify any areas that needed changing or improvement to enable them to perform the preceptor role or working with learners.

Building on their belief that organisationally preceptorship was not done well, paramedics identified a range of areas that are in need of improvement, these included the need for:

- Improved communication between all stakeholders.
- Training and better preparation for the role.
- A formal preceptorship structure and support system.
- Mentoring, feedback and professional development.

At this point it is important to recall the discussion in chapter seven regarding the dual roles and capabilities of a paramedic preceptor, incorporating capability as a paramedic and capability as a preceptor. Each of the areas above contribute to building and supporting the capabilities of a paramedic preceptor, and each will be discussed separately and in more detail in this chapter. This chapter differs in presentation from earlier findings chapters in that the data will be both reported and discussed together rather than separately. This approach allows me to incorporate key points included in previous discussion sections (chapters 5 to 8), which align with, and provide further emphasis for, the points made in this chapter.

9.2 Clear communication lines between all stakeholders

During the interview process for this study participants volunteered their perspectives at a variety of points throughout the questioning as these points occurred to them, on what needed to be improved to enable them to undertake the preceptor role effectively. In addition to this, the schedule of questions included a specific question on what refinements, or improvements, were needed. In the lead up to answering this question a common belief identified by participants was that the provision of preceptorship to learners was not done well.

As previously discussed, participants suggested that preceptorship was *haphazard* (Charles) or *ad-hoc* (Paul). These sentiments were summarised by Paul in his discussion of how preceptorship was performed organisation wide:

The organisation is cost contained, its resource stretched... and you're kind of left to your own devices as to how you do it with a little bit of guidance. The quality of how it happens is highly variable. That's how I see it at the moment. (Paul)

Chapter five highlighted that participants believed that there was a lack of clarity on what their role entailed. Further to this in chapter six, participants identified that they were often not aware they were going to be working with a learner until they arrived at the station for a shift and found their learner waiting for them. This finding is not unique to my research; O'Meara, Hickson, et al. (2014) found in their Victorian based study involving all stakeholders (paramedics, students and employment and educator representatives) that paramedics had concern for their ability to prepare for learners on placement as they often arrived at work to find a student waiting for them without warning. This was reinforced by paramedic students in the same study who reported arriving for their placement to find that no one on the station was expecting them. This lack of prior knowledge denies paramedics the opportunity to prepare themselves for the learner; which as outlined in chapter seven, precludes them from becoming aware of each learner's particular needs and reduces their capacity to plan what they would do with the learner. Each of these challenges reiterate the need for improved communication between stakeholders, as Chris summarised:

...if my superior just told me this is what they can do, this is what they can't do, this is what I expect them to do, this is what I don't expect them to do, if they give me a bit more clarity on what the roles of the student is then it sort of helps me perform my role... (Chris)

The importance of communicating expectations to preceptors on what is required for a learner was a recurring theme in the data analysis. In light of the wide variety of learners that preceptors may be working with, as outlined in table 8.1 (chapter eight), the lack of clarity about what is expected has a significant adverse outcome on preceptor performance and potentially learner experience. Roger summarised the issue and proposed a solution:

...there's so much medical information, there are thousands of resources, where do you start... apart from the boring repetition of your guidelines. I think where you start is you have someone in education [an ambulance service educator] that knows what the... questions are, knows what the issues are we [the preceptors] would like to tease out, knows what emphasis we need to place where... It's giving supportive information so that a mentor or a student at any time can go in and have a look at it. (Roger)

Roger was suggesting a role that exists in many other health professions, where one (or more, depending on site characteristics) educator coordinates the clinical experience placements or experiences for that site. There are examples of this in nursing (Pinchera, O'Keefe, O'Shea, & Lawler, 2014), medicine (Margo, Fincher, & Espey, 2014) and pharmacy (Loy, Yang, Moss, Kemp, & Brown, 2017). Coordinating roles such as this have been identified as successful approaches to providing information to learners and preceptors, providing clear expectations and aiding the preceptor in performing the functions of their role (Loy et al., 2017; Margo et al., 2014; Pinchera et al., 2014; Stutz-Tanenbaum, Hanson, Koski, & Greene, 2015), as well as in the selection suitable of preceptors (Pinchera et al., 2014). Each of these aspects have been identified as issues in the preceptorship experiences of participants in this research.

As discussed in chapter five, a key element in taking on any role is that the person has a clear understanding of what that role is and what it entails. Throughout my research this lack of clarity was identified as a gap in how preceptorship is currently managed, and as Simon discussed it is an area that if addressed, would improve preceptorship in paramedicine:

If you know what is to be expected of you to be a preceptor, it makes life easier to be a preceptor... So, there needs to be more formalized things in place saying, you have got this student, they are a year 1, year 2, year 3 or whatever, this is what they are allowed to do. This is what we will cover them to do under your supervision, etcetera.

(Simon)

The reported lack of clarity in expectations was not limited to preceptors. Participants in this study reported that they often found themselves asking the learners what they (the learners) were expected to do during their placement or learning experience. The learners were often unable to help as they also did not understand the expectations either, as Terry explained:

So if as a mentor you're given a book [referring to the student placement log-book] that you don't understand and you ask the student what they're supposed to do and they don't really know... I think a lot of our students get through despite our program... There's no real understanding of what's required in the program and the program itself was inconsistent. I don't think anyone truly gets a satisfactory experience unless you work with the few [preceptors] who do it really, really well. (Terry)

To achieve a greater understanding of expectations for preceptors and learners alike, Paul suggested there be a greater degree of interaction and communication between preceptors, ambulance services and education providers, particularly universities:

There should be workshops with... [universities] for instance, so that... [universities] can spell out what their expectations are of that preceptor, or the preceptors and what the expectations are for the

Student for their outcomes, and integrated in... [ambulance services] should be aware that there are some requirements, so an integrated system, where at the moment it is fairly spasmodic, so that the preceptors know what their role is, or their roles are, the students already know what their roles are and the organisation... know what their roles are and fulfil, them because as I have said, they have accepted the students so they should be meeting the requirements and the needs of the students. (Paul)

The lack of clarity and lack of communication on what is expected of both preceptors and learners highlights a key finding of this research, that there is a risk for ambulance services and education providers in the way preceptorship is managed within the profession. As Roger explained, this lack of clarity in relation to what can be reasonably expected of preceptors and learners may result in variable clinical and educational standards being applied, potentially resulting in a lower quality of paramedic at the end of the training:

So if I sit down and mark someone as independent or supervised at some level of clinical skills, knowledge or whatever, that's really just my opinion. What am I basing that on? I might give you a couple of examples in the report but what are my standards, what am I benchmarking that against, there isn't anything really. (Roger)

Terry commented further that beyond knowing what the expectations are for a given learner in a specific learning experience, how to meet these expectations is also an issue:

[We need] A program that everybody's working off, that the students understand what's required of them. More importantly the mentors

understand what's required of the program and of the students and how they can best provide that to the student because at the moment it's too inconsistent. (Terry)

The participants offered a number of solutions to address communication issues, in particular the inclusion of a role within ambulance services that acts as a coordinator for preceptor appointments and which acts as a support provider to paramedic preceptors and learners alike. Practice education coordinators such as the role proposed here operate over a range of different models, from employer or placement provider based positions (Rivera et al., 2018), to university based positions (Sobralse & Naegle, 2001). As detailed earlier in this section, similar roles exist in other health professions, with evidence of their value in those professions. Zawaduk, Healey-Ogden, Farrell, Lyall, and Taylor (2014) describe a triad approach to preceptorship in which the learner, preceptor and an educator from the nursing faculty work together to achieve successful preceptorship. These authors identify the value of the nurse educator as being a presence that can create continuity for the student, act as informer, supporter and advisor to both the preceptor and the student whilst also contributing to the competence of both.

Fostering positive relationships between the education provider and placement provider was also identified as a value educators bring to the relationship, particularly in the presence of declining clinical learning opportunities for the tertiary education sector (Zawaduk et al., 2014). Referring back to the actor concept described throughout this study, this role would act in many ways like a director might act toward actors performing counter roles. It is hard to imagine a dramatic performance being successful in the absence of direction, but this is the current situation in paramedicine, a complete lack of direction in the performance of paramedic preceptorship.

The solutions proposed by participants above, particularly the appointment of a coordinator, can resolve to some degree their concerns that there is a lack of communication regarding student placement and preceptor allocation, expectations during these learning periods, and standards to be applied. In the context of paramedic education in Australia, however, preceptors work with a range of learners, a large proportion of which are university students on placement, but which are not limited to university learners alone. Therefore, while a significant finding of my research is the need to establish a coordination role in the preceptorship process, how this might be applied to address the full range of learners and preceptorship contexts requires further investigation.

9.3 Training and preparation for the preceptor role.

As Terry suggested in the last quotation (Section 9.2 above), paramedics do not just need clearer communication on what they need to do when working with a learner, they also need to know how to do it. In chapter seven, paramedics reported a gap in how they are trained to work with learners and emphasised a need for formal training for the preceptor role. As discussed in chapter seven, paramedic preceptor is in fact two roles, with two sets of capabilities, both of which require educational support. Paramedics undertake their degree in paramedicine to gain paramedic skill sets. Despite some of the functions of a preceptor being present in the paramedic professional competency standards issued by the CAA (The Council of Ambulance Authorities, 2010) these are not a primary component of all paramedicine degrees. As graduates of a paramedic program, it is reasonable to believe that paramedics consider themselves as clinicians first, a similar phenomenon was reported in nursing where the educator role was considered secondary to that of the practitioner. (Trede, Sutton, & Bernoth, 2016)

Without exception, all participants made reference to the need for training or professional development for paramedics to create and maintain a skill set as preceptors, as well as maintaining their capability as a paramedic. A common theme, reflected in chapter seven, was the lack of formal training and the need for such training prior to commencing the preceptor role. This is supported in the paramedicine literature on preceptorship where training has been reported as needed for the role (Carver, 2016; O'Meara, Williams, et al., 2014). The majority of participants highlighted that the need for training in the preceptor role was not a new issue and had been raised for some time, as Samantha summarised:

We have pushed for it a lot, to get mentor training or preceptor training, or even just a day to get everyone together so we all know we are all on the same page with what we are teaching the students... I think the problem is it is money, it all comes down to money now
(Samantha)

Participants viewed the provision of training for preceptors as having a dual benefit in that it was a way to both improve performance as a preceptor, as well as provide recognition or reward in the form of a qualification at the end of the training, as Julie noted:

...there needs to be a formal component where you have a recognized qualification at the end. That increases the value... of the position.
(Julie)

Participants reported that, previously, some preceptors completed a Certificate IV in Training and Assessment (TAA) or, more recently, the Certificate IV in Training and Education (TAE), as it was offered by ambulance services. The requirement to hold that qualification, however, was discontinued. While Ira did not consider the Certificate IV

TAE as the perfect qualification for preceptors, he did feel that the qualification would be of value in the absence of a more tailored qualification:

even if we all run around, all of a sudden, with a certificate four in training and assessment, education and qualification is never bad. But, I'm not convinced it's fit for purpose for what we expect out mentors to do. (Ira).

Ira's comment that the Certificate IV TAE might not be fit for purpose is in reference to the unique aspects of the paramedic clinical environment and the vagaries of paramedicine. As outlined in chapter eight, paramedics are not simply working with a learner, they are working in a high stress clinical environment with a range of unique aspects such as trauma, isolation, emotion, stress and potential for injury or violence. Participants suggested the need for a preceptor course that provides them with skills and knowledge on how to support, teach and assess learners in the clinical setting, as well as detail on what the learners are learning and what the expectations are of themselves and their learners. Beyond this however, in alignment with the unique paramedicine environment, participants highlighted the need for a preceptor course that includes knowledge and skill in communicating with learners in critical environments, working with learners in emotional, violent or clinically critical settings. The findings of this study indicate participants were not able to access training to enable them to better understand their role as a preceptor and, importantly, be able to fulfil that role effectively.

Throughout the literature in paramedicine there is little reference to training programs for preceptors, other than a reference from one study of student experiences in the state of Victoria (Boyle et al., 2008) in which it was recommended that clinical instructors undertake a short course in workplace training. However a more recent

study incorporating Victorian participants reported that while there was training in the distant past for clinical instructors, there is no longer any training provided (O'Meara, Williams, et al., 2014). This suggests that the experience described by my participants, that there was training but it was discontinued, is consistent across other jurisdictions.

The findings of this section highlight what preceptors consider is needed to improve their preparedness and performance and reinforce the findings of chapter seven.

However, beyond the obvious enhancement in knowledge and skills in performing the role of a preceptor, appropriate and tailored training and CPD will also aid in fully understanding the preceptor role and gaining the skills and knowledge to fulfil that role.

9.4 A formal preceptorship structure and support system.

Chapter six provided an analysis of the data regarding how paramedics have been appointed to the preceptor role, with a key finding being the overall lack of a selection process and expectation that all paramedics should precept. Participants reflected a need for more structure around who is appointed to the preceptor role, with criteria developed against which each preceptor is assessed prior to their appointment to the role. These sentiments were summarised by Paul:

...as I said, it should be harder to become a preceptor, there should be an interview process, just to have the basics isn't really good enough... if we do it really well then it is kudos at the end for the company as well as the industry, if the student goes back and says "I was bored to death the whole time" then it reflects on the preceptor, the region and the company, where there should be a program in place... so there is a game plan, there is no game plan at the moment, it is just "you are working with them for four weeks and that is it". (Paul)

Beyond the appointment of preceptors, participants also described an uncoordinated system of professional experience education for paramedics undertaking a learning experience regardless of level, and highlighted the need for clarity in the process and structure they work under, as Roger explained:

I don't see the infrastructure there to support preceptors, you're given a task so go away and do it with very little interaction and there are not very many tools to how to do it better and to do it well I think is a difficult job, it's a difficult task, it's too ad-hoc as to how its taught...it needs to be much more structured, much more supported in terms of resources and much more specific in what the standards are that we are requiring in order to get this level of assessment (Roger)

The need for a formalised structure was echoed by other participants. For example, Terry described a need to develop a structure which specifically encompasses the intern program, where graduate paramedics undertake a year of preceptor-supervised training and experience on the job, prior to being given the final approval to undertake independent practice as a paramedic. Each service already has an intern program, however as Terry suggested, these programs are not well understood by the preceptors:

I think we have to start with a structure post graduate, if they're going to call them post graduate, but a structured intern program that may need tweaking from year to year as practices change but doesn't need to be re-written because at the moment it doesn't really exist in a format that anyone completely understands... A thorough intern program that everybody knows what is required. The student or the intern comes to us on day one, sits down in an office like this and we

say to them this is what is required of you, here is the program.

(Terry)

Interestingly, the lack of a formal structure may be a matter that varies across the country, as the data in this study is from participants from NSW and Tasmania.

O'Meara, Hickson, et al. (2014) in their discussion of paramedic student education in Victoria refer to a single clinical placement booklet which is similar to what my participants refer to as a log book, which is used consistently across all Victorian universities. It is not clear from O'Meara and colleagues' document or elsewhere in the associated literature, what occurs when university students studying outside of Victoria are given a clinical placement in Victoria.

Thinking more broadly than any single course of study, Samantha suggested that within a structured system, there is a need for regular meetings of preceptors with their own supervisors (in Samantha's case, the CSO) which would address any questions about the training program or programs. She explained that, in her experience, this was done on an individual basis instead of collectively, thereby risking inconsistency:

They should have a regular meeting of preceptors so that they can discuss what, where everyone is at and what level they need to be, instead of just this CSO talks to that person, this CSO talks to this person and the educator talks to this person, they may have different perceptions of what level people should be at and what milestones, but if they all come together that gives them a consistent approach to everyone. (Samantha)

The concept of a forum in which preceptors could have conversations that allow them to learn from each other's experiences was supported by other participants. Paul extended the concept suggesting that preceptors could *have a support group* that

extends into daily practice to provide peer support in the role. The concepts raised by Paul and Samantha above align with findings identified in earlier chapters relating to how paramedics prepare themselves for the role of paramedic preceptor through communication with peers, the tea room conversation and through seeking feedback from other paramedic preceptors.

A significant finding of this research therefore, is the need to establish a community of practice (CoP) for paramedic preceptors. Wenger (1998) describes communities of practice as a community created, often informally, by individuals pursuing shared experiences. Communities of practice are characterised by mutual engagement, joint enterprise and a shared repertoire (Wenger, 1998, p. 73), all of which are present in the community of paramedic preceptors. The establishment of such a CoP would allow members to come together more freely and share their experiences and gain from a learning culture.

Davis (2006) conducted a small study of occupational therapy students and found that a community of practice was valuable in developing professional identity. She identified that when individuals function without coherence with others performing the same role (therefore in the same professional community), they engaged in what she termed “neutral independent participation” (Davis, 2006, p. 5), which she then linked to misinterpreted or misunderstood identity. Engaging with other practitioners and sharing experiences with others in the same role through a CoP, however, was found to improve the development of shared language and identity (Davis, 2006; Morley, 2016). In relation to the data reflected in this research, paramedic preceptors do not have a shared language (Section 5.3.1) or a clear identity (Section 5.3.2), a situation which a CoP has the potential to address. The need for a community of practice specific to the paramedic preceptor role, therefore, is a significant finding of this research.

9.5 Mentoring, feedback and professional development

Participants emphasised the need for a support system for paramedic preceptors, to enhance their ongoing development once they are in the preceptor role. Such a system would include mentoring in the role, ongoing formative feedback on their performance and the provision of, or at least support for, professional development opportunities.

Simon suggested that preceptors should themselves have a preceptor:

I really think the preceptor should be precepted... maybe working with someone who is qualified, well not qualified, someone who is an expert in precepting who has come along and worked with you for a while. (Simon)

The concept of mentoring preceptors in their preceptor role has been successfully applied in other disciplines, such as pharmacy, where mentoring is a recommended approach in the preceptor development program (Johnson, O'Neal, & Condren, 2014; Mulherin, Walter, & Cox, 2018). A mentor would be of particular value in the early stages of their career where a paramedic is both newly qualified as a paramedic and also learning the role of the preceptor, as Tanya outlined:

People feel as though they want more support in the early stages of qualifying, the 6-12 months post qualifying people want more support as they are trying to be a mentor and trying to figure out how to be a paramedic themselves... It might be as simple as a chat, "how are you going as a mentor" and do you need ideas, assistance, anything like that. "What sort of resources have you got? What can we help you with?". (Tanya)

Beyond mentoring for the preceptor role, participants also highlighted the need for feedback on their performance, both from the organisation and from their learners.

Michael discussed this in relation to the provision of 360 degree feedback:

I like the concept of the three hundred sixty degree feedback...

[following a learning experience] the preceptor has some sort of a marking scale where they'll mark the person [the learner] and that goes off to the university. I don't know whether they do the same about their preceptor, but they should, and not only that, it should be fed back to the preceptor, as to what the student thought is good, bad or indifferent. (Michael)

When speaking from an organisational perspective, Brian supported this idea as he reflected on the need for a feedback mechanism that would encourage change and development in the preceptor role:

If we can initiate some way of a mechanism to feedback to the preceptor to encourage change or to facilitate change in their techniques that would be one step forward. (Brian)

The provision of feedback and mentoring to preceptors would provide an opportunity for preceptors to become aware of and reflect upon their performance in the light of the expectations of the organisations involved (employers and education providers) and their learners, and to identify gaps in their practice as preceptors. The practice education coordinator role described in Section 9.2 would be well placed to perform this function, which aligns with the literature from other health professions (Pinchera et al., 2014; Stutz-Tanenbaum et al., 2015). The logical progression from this type of developmental guidance is toward formal professional development. As identified in chapter seven, the availability of customised and relevant training and professional

development for preceptors is limited; however, participants indicated that they made use of external opportunities such as university courses and other workshops. Aligning with the findings of chapter seven, participants highlighted that there is a need for more structured professional development beyond initial training as a paramedic in order to become a preceptor.

A key finding from this research, therefore, is the importance of feedback to paramedics on their performance as preceptors, to allow them to evaluate their capabilities and access professional development opportunities in order to address any issues identified in the feedback process.

9.6 Chapter summary

Chapters five through to eight presented an analysis of the data and emerging categories within the data surrounding the performance of paramedics working with learners, their suitability for the role and their level of preparation as preceptors. In this chapter I have presented an analysis of what the participants raised as areas of need in order to improve preceptorship. Many of the points raised in this final findings chapter align with and reinforce emergent categories from the first four findings chapters. In this chapter I have shown that paramedic preceptors see gaps in the current system of preceptorship including: the absence of a formalised preceptorship system; little to no communication or coordination; a lack of training and development; or any ongoing development for preceptors in their role. However, participant also highlighted solutions that could overcome these gaps including formalising the management of preceptorship; improving communication pathways; and providing ongoing training and development. In addition to these, participants suggested the implementation of more novel approaches not previously evident in paramedicine that included the appointment of a coordination position in the ambulance service education

departments to provide a leadership role to preceptors; the introduction of a community of practice to provide preceptors with a forum for informal development; and the facilitation of mentorship for preceptors which would naturally evolve from the CoP.

Chapter Ten – Conclusion and recommendations

10.1 Introduction

This thesis has presented and analysed the data from 19 intensive interviews of paramedic preceptors in two Australian States (New South Wales and Tasmania), in which participants' experience of the role of paramedic preceptor was explored. The findings demonstrate that there are five key challenges that face paramedics performing the preceptor role including: a lack of clarity on what their role is, the language used to describe that role; what the role actually entails; the expectations of paramedics acting in the role, and how they should perform the role. Throughout the thesis I have used symbolic interactionism and role theory as theoretical lenses through which to examine and analyse the findings with the aim of generating grounded theory from the data.

This final chapter will present the collation of each element of the thesis and present the model of paramedic preceptorship I have constructed from the data in this study. Section 10.2 views paramedic preceptorship through role performance, making use of the actor analogy used throughout this thesis to articulate the requirements of successful role performance. Each component of the actor analogy is constructed with reference to the findings. Section 10.3 outlines the areas yet to be investigated and provides recommendations for future research.

10.2 Viewing paramedic preceptorship through the lens of role performance

Throughout this thesis I have used the actor analogy for explaining role theory, which incorporates five key elements required for someone to successfully accept and perform a role. These five elements include: *the plot* or the expectations that are placed on participants of the role; *the script* or the language used to articulate the role; *casting* which oversees the selection and appointment of performers for the role; *direction* or the provision of education and development for the role; and finally *peri and post-performance review* which provides the actor and other stakeholders with some feedback on how their performance was received and how it might be improved for the next performance. These five elements comprise the theory of *Role Performance Model of Paramedic Preceptorship*, which is an outcome of this research. I have represented these elements in figure 10.1 as a cycle which should continue through each preceptorship appointment. Each of these stages in the cycle are discussed in Sections 10.2.1 to 10.2.4.

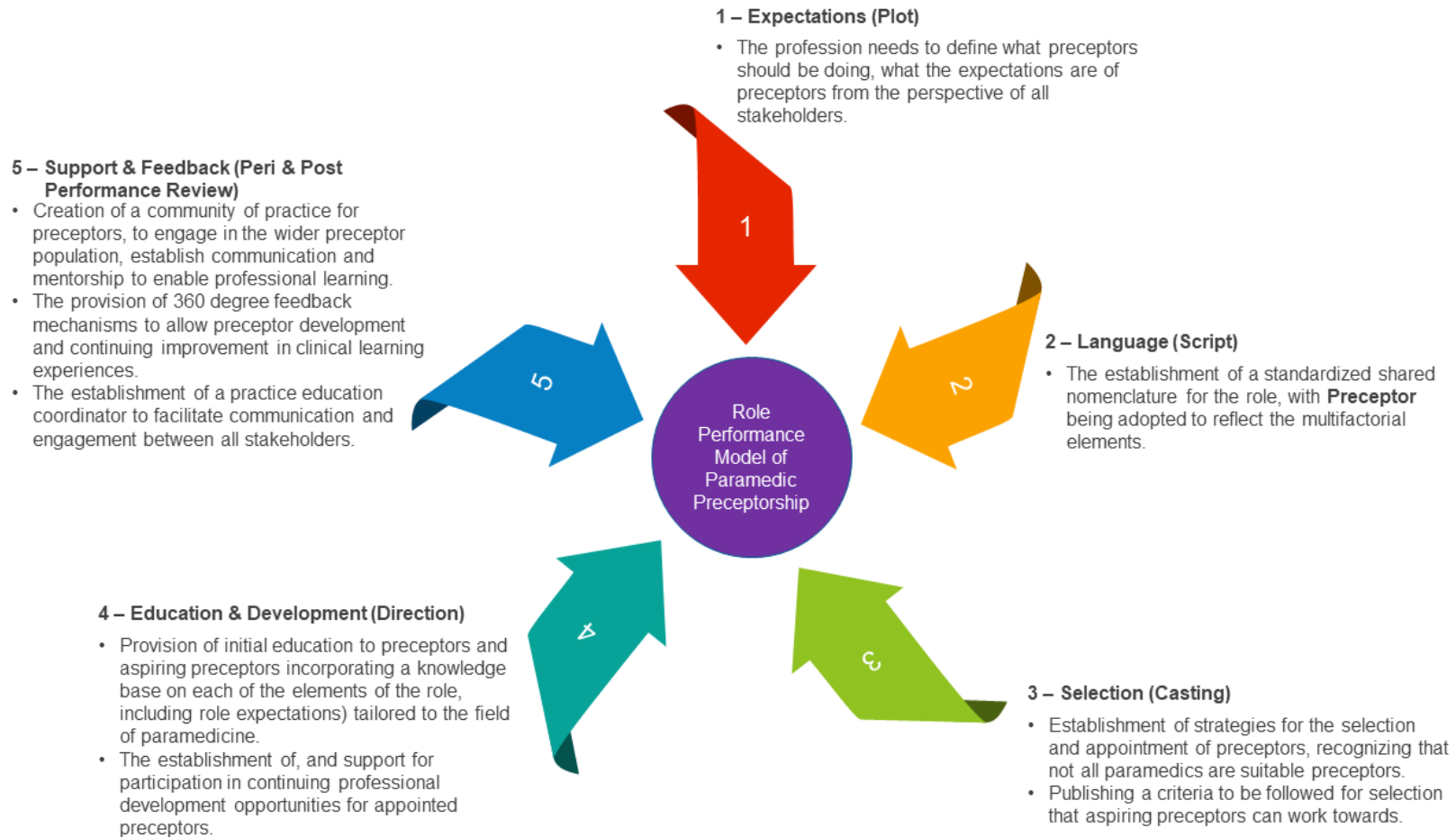


Figure 10.1. Role Performance Model of Paramedic Preceptorship (Copyright Dale Edwards 2018)

10.2.1 Setting the scene, the plot for paramedic preceptorship.

In chapter 5, Section 5.3.3, I explained that according to role theory, language and expectations have a bidirectional influence on each other (see Figure 10.2). When a role is created, the expectations for that role will inform the language used to describe the role, and as the language is used it will further create expectations in those stakeholders receiving the communication. This process is a fundamental element of symbolic interactionism, where the role performer and stakeholders, in counter and complementary roles, are establishing a shared meaning for the language used. The first step in this process is the establishment of expectations or, from a role performance perspective, setting the scene or creating the plot within which the role functions.

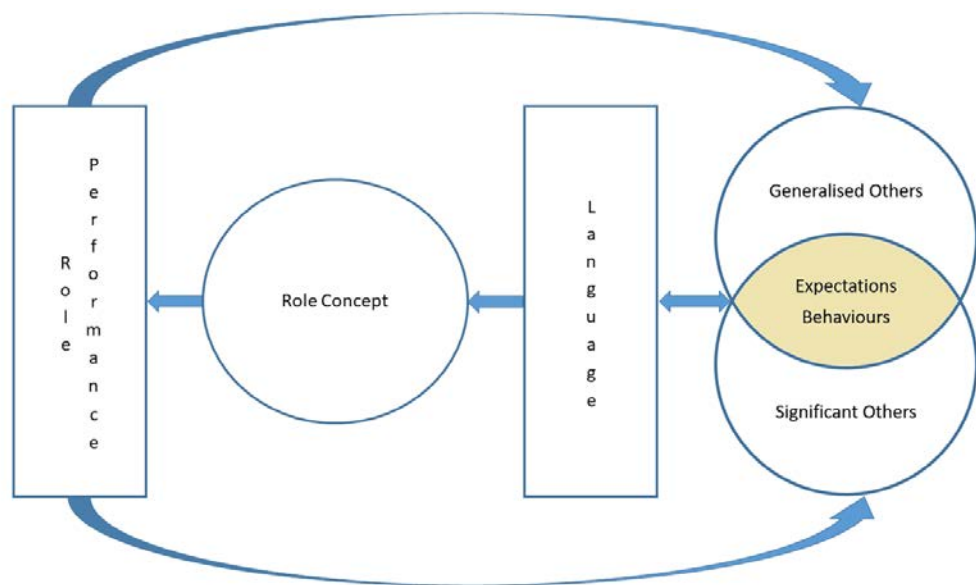


Figure 10.2. Role Theory Cycle (previously Figure 5.2) (Copyright Dale Edwards 2018)

Participants in my research identified that the role of a paramedic preceptor is multidimensional; encompassing a range of additional functions, from being a teacher and assessor; guide; supervisor; counsellor; and mentor. While each of these roles could exist in their own right, in the context of the paramedic preceptor, each of these

functions exist within the package of what is expected of a preceptor. This concept aligns with the findings of a doctoral study by Carver (2016) who found that preceptors for entry level paramedics in their first year of practice performed the roles of coach, role model, socialiser and protector. My research differs from and builds upon Carver's findings as it considers all preceptorship requirements across the continuum of paramedic education, which impacts on the extent to which each function might be required or expected, as discussed below (see Figure 10.3).

Paramedics are required to act as preceptors for a wide range of learners, from university placement, vocational trainee, intern, paramedics undertaking their ICP training, and members of other health disciplines (see chapter 8, Table 8.1). Across these learner groups the demands on the preceptor change as the education programs have differing demands, and the learners have differing levels of experience and confidence. What is expected of a preceptor for a first-year university student on placement will be very different to what is expected of a preceptor working with an intensive care paramedic student with several years' experience in paramedicine. Each level of preceptor contribution will come with changing intensities of teaching, assessment, level of support, and role modelling guidance or counselling required by the learner. Therefore, there is a continuum of preceptorship in paramedicine that preceptors traverse in response to each learner's characteristics and needs.

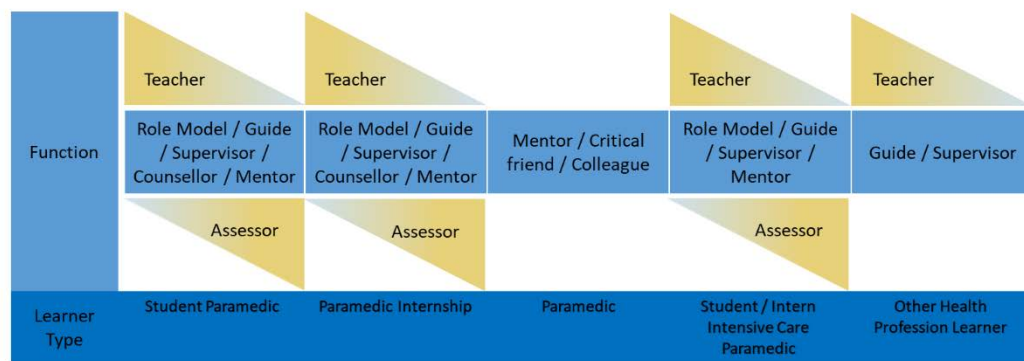


Figure 10.3. The Preceptorship Continuum in Paramedicine (Copyright Dale Edwards 2018)

Figure 10.3 presents an emerging theory of the preceptorship continuum, representing the change in functions a preceptor performs with each type of learner. As outlined in chapter one, and which emerged from the data in chapter eight, in the absence of a vast pool of available preceptors and with the growth in demand for professional experience learning opportunities, paramedic preceptors may find themselves working with each of these types of learner. This emerging theory proposes that the diverse functions performed by a paramedic preceptor will fluctuate depending not only on the level of education undertaken by a learner, but also each learner's state of progress within their qualification.

I will use the experience of precepting a paramedic intern as an example to unpack Figure 10.3 in a little more detail.

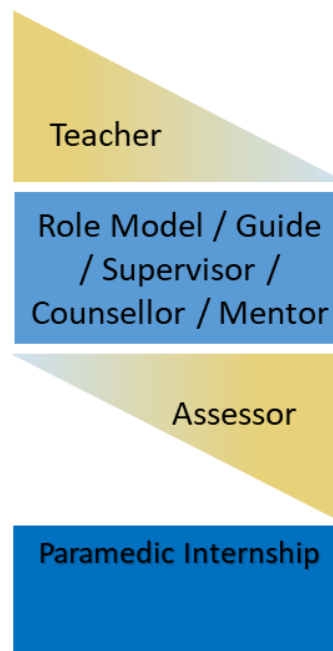


Figure 10.4. The experience of preceptorship for the paramedic intern (Copyright Dale Edwards 2018)

In their first week of practice, a paramedic intern will require greater levels of supervision and guidance and will require a greater degree of teaching than that same intern might need when in the last week of their intern year. In the later period of their internship, they will have assimilated into the workforce, been taught the clinical application of their skills and knowledge, and will be at the stage of being assessed for their readiness to practice independently. In Figure 10.4, the length of time the learner is undertaking his/her internship progresses from left to right, and the change in the role of the preceptor (teacher, assessor) also goes from left to right. The two right angle triangles represent the practice of the preceptor – with the topmost triangle indicating that the teacher role gradually reduces over time (darker in shading and taller on the left, to lighter and shorter on the right), while the bottom triangle indicates that concurrently, the assessor role increases. Thus, as the intern progresses in his/her studies (from left to right in the diagram) and becomes more capable to practice as a

paramedic over time, the preceptor role, which started out as supervisor, teacher and guide, changes to being more of an assessor role. This model repeats to varying degrees with each learner, with the degree of change being influenced by the nature and length of the clinical learning experience for that learner.

The foundation for this emerging theory of a preceptorship continuum is underpinned by my findings in chapter five where participants highlighted the functions they performed. It is also supported by data presented and analysed in chapter eight where participants identified the range of student and organisational factors experienced in the preceptor role. This is, of course, an emerging theory that invites stakeholders in paramedic education to contribute to the discourse on the expectations of, and hence the capabilities of, a preceptor when working with learners in paramedicine.

This research has shown that paramedic preceptors believe they have a multitude of functions when working with learners, including acting as a teacher, assessor, role model, guide, supervisor, counsellor and mentor. Through the development of an evidence base on what a preceptor is required to do, it becomes possible to develop systems and structures that provide guidance to all stakeholders on what a preceptor is expected to do. These structures and guidelines then support the development of clear role definition and the representation of expectations to those performing the paramedic preceptor role and associated stakeholders.

**Recommendation
1:**

- That education providers (tertiary and vocational) clearly communicate their expectations for the paramedic preceptor for the role in general as well as for each learning experience in which preceptors are allocated a learner.

10.2.1.1 Implications from the plot

Recommendation one has a number of implications for the profession. For education providers there is a need to work together to establish clear and consistent expectations, possibly using the example set in Victoria where a single clinical workbook is used by all universities as a foundation that can inform expectations for all levels of learner. The use of standardised documentation will improve the consistency of preceptorship services and educational quality outcomes. For employers, there is a need to establish and communicate any additional workplace expectations to inform stakeholders and aspiring paramedic preceptors which will then positively impact preceptor performance as well as motivation for the role. For paramedic preceptors, a greater level of communication and clarity of expectations will allow for decision making on desire to undertake the role as well as guide professional and educational development for the role.

The final implication in setting the scene/developing the plot for the paramedic preceptor is one of greater collaboration across stakeholder groups, thereby a profession wide implication. As has been outlined in prior research there are challenges in communication between stakeholders in paramedic preceptorship (Carver, 2016; O'Meara, Williams, et al., 2014). The profession needs to come together and work collaboratively to establish a functional model of paramedic preceptorship that meets the needs of all learners across the profession.

10.2.2 Scripting the role of the paramedic preceptor

Symbolic interactionism tells us that how individuals behave or function in society is informed by the meaning they derive from symbols, or language (Blumer, 1986).

Similarly, role theory relies heavily on language, where language informs and is informed by the expectations of others (Figure 10.2). My research has demonstrated that there is inconsistency in the language used to describe the role and functions performed by paramedics working with learners. I have established that terms such as mentor, instructor and supervisor do not adequately reflect the role and associated functions performed. This is demonstrated by the variety of functions and inconsistencies expressed by participants in chapter five when describing their understanding of the term mentor. The one consistent point made by participants in this regard, was that a mentoring relationship is not a formal relationship. This being the case, I propose that it is an incompatible term to describe the role paramedics perform when working with learners.

The findings of this research indicate that the terminology that most accurately reflects the role paramedics perform when working with learners is **preceptor**. Figure 10.3 reflects the multifunctional aspects of the role. Beyond the functions highlighted in figure 10.3, however, it is important to recall the dual capabilities discussed throughout this thesis, that is, capable paramedic and capable preceptor. To that end the nomenclature used should not be limited to preceptor, but more the encompassing term *Paramedic Preceptor* to communicate the dual capabilities and associated expectations.

Recommendation 2:

- That the paramedicine profession, incorporating employers, education providers, paramedics and professional bodies implement the term **Paramedic Preceptor** as the standardised language used to describe the role paramedics fulfil when working with learners.

10.2.3 Casting the right person for the role.

Chapter six explored the complexities of identifying and appointing the right person to the role of paramedic preceptor, reflecting a need to take into account the educational goals of the clinical learning experience, and the available preceptors. Participants consistently highlighted problems with the current system where preceptorship is considered a default role for all paramedics. However, at the same time it is important to recognise the high demands placed on ambulance services to take learners from external bodies as well as from professions outside of paramedicine. There is a risk that this problem will worsen in the future as demand grows unless a structured system is put into place to control demand, as well as to ensure that the 'right' paramedics are selected to perform the role of preceptor.

My research has shown that not all paramedics are suitable for the preceptor role and not all paramedics are willing to perform the role all of the time. This can be due to a number of factors, including the paramedic having insufficient self-efficacy as a paramedic, not holding the desirable attributes to perform the role, being fatigued due to work or life influences (including excessive preceptorship without respite) or simply not being motivated to perform the role.

Beyond these factors, it is important to recall the discussion in chapter seven that the paramedic preceptor role requires those two sets of capabilities (paramedic and preceptor), and as such incumbents must be selected with due consideration to both of

these. It is a significant finding of this research that where paramedics are not suitable for the role they can have a detrimental impact on the learner, therefore, it is essential that ambulance services manage the process of preceptor appointment more formally.

While a key finding of this research is the need for a formal selection process for paramedic preceptors, there is scope for further research to establish what factors need to be taken into account and the criteria that need to be applied to the process, to ensure the right person is appointed to the role. Further enquiry into the capabilities required of paramedics acting in the preceptor role is essential.

**Recommendation
3:**

- That further research be conducted to establish the requirements for appointment to the paramedic preceptor role, resulting in the development of a selection criteria that can be used by ambulance services.

**Recommendation
4:**

- That pursuant to recommendation 3, ambulance services institute a formal process of selection and appointment, allowing for periods of respite from the preceptor role where needed.

10.2.3.1 Casting implications

The establishment of a selection criteria and casting process has implications for all stakeholders in ensuring that the right paramedic is performing the role of paramedic preceptor thus aiding in the delivery of high quality professional education. There are further implications for performance management and quality control procedures, including the establishment of set criteria to enable preceptor performance and outcomes to be measured. Furthermore, paramedics seeking to perform the role of

paramedic preceptor in the future will be able to refer to a set of criteria that will guide them on the direction of their professional development and self-preparation, prior to taking on the role.

10.2.4 Providing direction.

Throughout this research (see chapter seven and nine) there has been extensive commentary on the absence of education and training opportunities for paramedic preceptors relating to their capability as a preceptor. This reinforces prior research that highlighted similar concerns in NSW (Carver, 2016), Victoria and New Zealand (O'Meara, Williams, et al., 2014). The lack of initial education and training, along with the absence of clear communication of expectations, prevents paramedics from being able to prepare for and become qualified for the role of paramedic preceptor.

This lack of capacity to prepare for the role has an impact on numerous factors affecting the paramedic preceptor, including: it being a barrier to expectation management for all parties; a barrier to paramedics proactively taking on the role (if they do not know what is expected of them, they are less likely to feel a sense of self-efficacy for the role); and compromise the learning experience for both the paramedic preceptor and the learner. The potential result will be a negative learning experience and reduced educational quality.

Significantly, my research findings indicate the need to establish a paramedicine-specific preceptor course that will enable the implementation of successful preceptorship performance within this unique working environment. The need for a paramedicine-specific preceptor course was also recommended by Carver (2016), who extended this recommendation by proposing a specific curriculum model. My research supports this

recommendation, however, extends the context beyond preceptorship for first year paramedic interns to the full range of the paramedic education continuum (Figure 10.3).

A further finding from this research is that newly qualified paramedics are not ready to take on the dual capabilities of a paramedic preceptor as they have not gained sufficient experience, capability and self-efficacy in their role as paramedics. It is unclear to what extent preceptorship is addressed in each of the university entry level qualifications for paramedics, however, my research and teaching experience in paramedic higher education would indicate that this is not the right place for such education to occur due to the lack of readiness of the learners, at this stage of their education, to understand what it means to be a paramedic preceptor. Therefore, any training developed and provided to the profession should be focussed in the post graduate domain and not incorporated into the undergraduate degree.

Recommendation 5:	<ul style="list-style-type: none">• That a post graduate program be developed, at Post Graduate Certificate level (as a minimum) to build the preceptor capabilities required in the Paramedic Preceptor role.
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Further to the introduction of an initial qualification for paramedic preceptors, participants highlighted the need for continuing professional development for the role. Following the cycle of *Role Performance Model of Paramedic Preceptorship*, upon setting and scripting the plot, casting for the role and then educating the actor on the role, professional development allows for rehearsal of the role. This is of particular value as paramedic preceptors then will make use of the opportunity to identify and improve areas of performance gap they perceive in themselves or might be identified during performance review (Section 10.2.5). In summary, this element of the cycle

represents the director providing the actor with the opportunity to learn and rehearse the role prior to and during performances.

Recommendation 6:	<ul style="list-style-type: none">• That the paramedicine profession, incorporating education providers, employers and professional bodies establish a suite of professional development opportunities relevant to the paramedic preceptor role.
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10.2.4.1 Direction implications

The development of an education program and a suite of professional development opportunities for the preceptor capability will initially be informed by the language and expectations established in stages one and two of the *Role Performance Model of Paramedic Preceptorship*, however, education and professional development would also have an impact on further expectation management as stakeholders and paramedic preceptors become more informed about the intricacies of the role.

My findings also highlight a need for formal recognition of the role of a paramedic preceptor, with one mechanism for this being through the provision of, or access to, a formal qualification. The creation of a formal qualification would serve to incentivise paramedics to participate in the role, which in turn will aid in the casting process through increased willingness of applicants to undertake the role, and with evidence of qualification for the role.

The final implication from the provision of direction or education and professional development is the natural improvement in educational output and educational experiences in paramedicine.

10.2.5 Performance review

Throughout this research it became evident that the current system of preceptorship is ad-hoc, uncoordinated and in dire need of restructure. Chapter nine focussed on the demand for change, when participants highlighted a need for a structure which provides leadership in the form of a coordinator; ongoing feedback on their performance; and more effective communication with peers to enable the establishment of mentoring relationships for themselves in the paramedic preceptor role. The creation of a practice education coordinator along the lines reflected in nursing (Zawaduk et al., 2014) would facilitate most of these changes.

When coupled with the findings in earlier chapters regarding a lack of clear identity for paramedic preceptors, to the desire expressed here by participants for a forum or regular meetings of preceptors, it is apparent that there is a need for a CoP for paramedic preceptors. Drawing on the actor analogy of role theory, a CoP would allow paramedic preceptors to have a greater understanding of the expectations of the role (plot), develop a shared language that communicates their role (script) as well as providing informal education and development (rehearsal and direction) and the opportunity to seek feedback. How such a CoP might operate is yet to be determined as currently there are few opportunities such as during training or professional development for preceptors to come together as a community where shared meaning and role identity might be formed (Section 7.2.2).

Recommendation 7:

- That each ambulance service (or operational region where the ambulance service is sizeable) implement a dedicated practice education coordination role to facilitate the preceptorship process, including expectation management, paramedic preceptor selection, guidance and feedback.

**Recommendation
8:**

- That the paramedicine profession either nationally or in local jurisdictions, establish a CoP for paramedic preceptors.

10.3 Recommendations for future research

This study has discussed a range of requirements that need to be fulfilled in order to develop a successful preceptor program, including the need for paramedics to achieve sufficient capability (experience, confidence and resulting self-efficacy) as a paramedic prior to taking on a preceptor role, the variation in functions performed for each level of learner, and the need for a profession-specific training program for paramedic preceptors. This research has developed a theory of preceptorship that enables the profession to build on what is known to begin the process of establishing a successful preceptor program, however it also builds on earlier research to provide a foundation for establishing the finer detail on each of these requirements. Further areas for research include the following:

- This research has identified that to be a capable paramedic preceptor, one must first be a capable paramedic. Participants use terms such as 'good' and 'experienced' but more specificity is required. Identifying exactly what constitutes a capable paramedic would aid in establishing selection criteria for the paramedic preceptor role.
- This research has highlighted the dual capabilities of a paramedic preceptor, however the components of these two capabilities has not been expanded

upon. There is a need to further explore the dual capabilities and their ideal attributes to properly inform expectations, selection and performance review.

- This research does not address elements of the preceptor capability such as supervisory styles and the matching of supervisory styles with student learning styles. A future research study investigating how matching of supervisory and learning styles can be achieved in paramedicine is recommended.
- This research has discussed the informal learning paramedics experience through communication with their peers; the tea room conversation. While there is some research on this phenomenon in other fields, there is little in paramedicine. Given the growth in the workforce, the growing demand for paramedic services and the associated reduction in down time between cases, there is value in exploring this topic with a view to better understanding the value of learning in informal workplace communication, such as the tea room discussion, and how it can be facilitated in the modern practice of paramedicine.
- This research presented an emerging theory on the paramedic preceptorship continuum, based upon data within this study as well as my own reflections as a paramedic with significant professional experience. There is a need to explore and test this emerging theory to establish its validity and further inform the paramedic preceptorship workforce.
- Participants in my research identified the mutual benefit they gained from being a preceptor. the impact of preceptorship on clinical currency, preceptor skill development and job satisfaction is an area for further investigation.
- Paramedics often come to the profession from a range of prior work experiences, including other health professional backgrounds. While role

theory and symbolic interactionism tell us that language is not always transferable across professional cultures, it may be informative to establish if other health professional experiences have any impact on the understanding paramedics have of their role as a paramedic preceptor. Therefore a study into paramedic preceptors with an allied health professional background may be informative.

- There is potential for paramedics that have not been exposed to education for the preceptor role to fall back on their own learning experiences when functioning as a preceptor. The concept of precepting as they were precepted is an area that may have positive or negative impact on learners. Therefore I recommend further research to explore the presence of this phenomenon and how it impacts on learners and preceptors.
- The diversity in learners seeking clinical learning experiences and the support of paramedic preceptors creates a potential for a clash of organisational cultures. Learners from different educational institutions or professions may have cultural expectations and norms that are different to that of their preceptor. An investigation into how culture impacts the preceptorship and learning experience would be of value.

10.4 Study limitations

Methodological limitations identified during this study and how they were addressed have been outlined in Section 4.3.5. Beyond methodological limitations, no other limitations of note were identified for the study. There were however several areas not identified or evident in the data which have been addressed in the recommendations for further research.

As mentioned in section 4.3.5, this study was part of a doctoral degree that has spanned eight years. During this timeframe there may have been changes within the profession not represented in the data and subsequent analysis in this study. The field of paramedic preceptorship remains an area under investigated and underrepresented in the evidence-based literature, and as such continues to provide a context ripe for further investigation.

10.5 Chapter summary

This chapter completes the research cycle in this study which began after reviewing an article by Wray and McCall (2009) who suggested that, when considering experiential learning in paramedicine from the learner perspective, paramedics did not know much about the learners. Their suggestion caused me to question how much paramedics knew about themselves in relation to their role in working with learners. This research study began by asking the question *How do Paramedics view their readiness and preparedness to perform the preceptor role?*

Through this research I have discovered significant gaps in the knowledge of paramedic preceptors and the profession more broadly with regard to the paramedic preceptor role and, through its findings, proposes a number of recommendations for change. These findings extend the prior understanding of factors that impact on paramedic preceptors and their preparedness for fulfilling their dual role as paramedic and preceptor. It has demonstrated that the language used to articulate the role and associated expectations is not clear; the expectations are not adequately communicated; training and professional development are not readily available; and there is little or no capacity in the current system for communication, leadership and peer interaction through a community of practice.

My findings have produced a theory of paramedic preceptorship through the lens of role theory that is grounded in the data, the *Role Performance Model of Paramedic Preceptorship*. This theory provides the profession with the capability to address shortfalls in the paramedic preceptorship process and create a resilient system of preceptorship for the profession into the future. Furthermore, my research has established an emergent theory of the paramedic preceptorship continuum that warrants further investigation in future research endeavours.

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Appendix 1 – Ethics approval

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Katherine.Shaw@utas.edu.au



HUMAN RESEARCH ETHICS COMMITTEE (TASMANIA) NETWORK

5 February 2013

Assoc Prof Sharon Fraser
Faculty of Education
Locked Bag 1308

Student Researcher: Dale Edwards

Sent via email

Dear Assoc Prof Fraser

Re: MINIMAL RISK ETHICS APPLICATION APPROVAL
Ethics Ref: H0013034 - Paramedic Preceptors - A Question of Role Preparedness

We are pleased to advise that acting on a mandate from the Tasmania Social Sciences HREC, the Chair of the committee considered and approved the above project on 3 February 2013.

This approval constitutes ethical clearance by the Tasmania Social Sciences Human Research Ethics Committee. The decision and authority to commence the associated research may be dependent on factors beyond the remit of the ethics review process. For example, your research may need ethics clearance from other organisations or review by your research governance coordinator or Head of Department. It is your responsibility to find out if the approval of other bodies or authorities is required. It is recommended that the proposed research should not commence until you have satisfied these requirements.

Please note that this approval is for four years and is conditional upon receipt of an annual Progress Report. Ethics approval for this project will lapse if a Progress Report is not submitted.

The following conditions apply to this approval. Failure to abide by these conditions may result in suspension or discontinuation of approval.

1. It is the responsibility of the Chief Investigator to ensure that all investigators are aware of the terms of approval, to ensure the project is conducted as approved by the Ethics Committee, and to notify the Committee if any investigators are added to, or cease involvement with, the project.

A PARTNERSHIP PROGRAM IN CONJUNCTION WITH THE DEPARTMENT OF HEALTH AND HUMAN SERVICES

2. Complaints: If any complaints are received or ethical issues arise during the course of the project, investigators should advise the Executive Officer of the Ethics Committee on 03 6226 7479 or human.ethics@utas.edu.au.
3. Incidents or adverse effects: Investigators should notify the Ethics Committee immediately of any serious or unexpected adverse effects on participants or unforeseen events affecting the ethical acceptability of the project.
4. Amendments to Project: Modifications to the project must not proceed until approval is obtained from the Ethics Committee. Please submit an Amendment Form (available on our website) to notify the Ethics Committee of the proposed modifications.
5. Annual Report: Continued approval for this project is dependent on the submission of a Progress Report by the anniversary date of your approval. You will be sent a courtesy reminder closer to this date. Failure to submit a Progress Report will mean that ethics approval for this project will lapse.
6. Final Report: A Final Report and a copy of any published material arising from the project, either in full or abstract, must be provided at the end of the project.

Yours sincerely

Katherine
Ethics Officer
Tasmania Social Sciences HREC

Appendix 2 – Consent form

CONSENT FORM

Title of Project: *Paramedic Preceptors - A Question of Role Preparedness.*

-
1. I have read and understood the 'Information Sheet' for this project.
 2. The nature and possible effects of the study have been explained to me.
 3. I understand that the study involves one semi-structured, recorded interviews of approximately one hour that is conducted face to face.
 4. I understand that all research data will be securely stored for five years, after which the paper data will be shredded and the digital data deleted.
 5. Any questions that I have asked have been answered to my satisfaction.
 6. I understand that I will be provided the opportunity to review a transcript of my interviews and amend any factual inaccuracies.
 7. I agree that research data gathered from me for the study may be published provided that I cannot be identified as a participant.
 8. I understand that the researcher will maintain my identity confidential and that any information I supply to the researcher will be used only for the purposes of the research.
 9. I agree to participate in this investigation and understand that I may withdraw at any time without any effect, and if I so wish, may request that any data I have supplied to date be withdrawn from the research.

Name of Participant: _____

Signature: _____

Date: _____

Statement by Investigator☐

I have explained the project & the implications of participation in it to this volunteer and I believe that the consent is informed and that he/she understands the implications of participation

If the Investigator has not had an opportunity to talk to participants prior to them participating, the following must be ticked.

☐

The participant has received the Information Sheet where my details have been provided so participants have the opportunity to contact me prior to consenting to participate in this project.

Name of Investigator

Dale Edwards

Signature of Investigator

Date

Appendix 3 – Participant information sheet

**PARTICIPANT INFORMATION SHEET (PROFORMA)
SOCIAL SCIENCE/ HUMANITIES
RESEARCH**

Paramedic Preceptors - A Question of Role Preparedness.

Invitation

You are invited to participate in a research study into the experiences of preceptors in the paramedic profession and their readiness to fulfil the role of preceptor.

1. 'What is the purpose of this study?'

The purpose of the study is to explore:

1. The experiences of paramedics in performing the role of preceptor or mentor.
2. How paramedics view their readiness to perform the role of preceptor or mentor.

2. 'Why have I been invited to participate in this study?'

You have been invited to participate in this study because you are currently a practicing paramedic who also performs the role of preceptor or mentor.

4. 'What does this study involve?'

You will participate in a face-to-face interview of approximately one hour in duration. The interview will explore:

- Your training and experience as a paramedic to provide context to the primary focus of the research
- Your experience of and experiences in performing the role of preceptor or mentor in paramedic practice
- Your qualifications in preceptorship
- Your understandings of your own readiness to perform in the preceptor or mentor role, both now and throughout your career.

It is important that you understand that your involvement in this study is voluntary. While I would be pleased to have you participate, I respect your right to decline. If you decide to discontinue participation at any time, you may do so without providing an explanation. All information will be treated in a confidential manner. All interviews will be digitally recorded and transcribed. Once the interview has been transcribed, you will have the opportunity to review the transcript and amend if required. Pseudonyms will be used at all times in the analysis of the data and your name will not be used in any publication arising out of the research. All of the research will be kept in a locked cabinet in the office of the researcher, Dale Edwards, on a secure computer hard drive and a secure backup storage hard drive. Any data stored on university servers will be password protected. All paper data will be shredded and digital data deleted following the mandatory holding time of five years.

5. Are there any possible benefits from participation in this study?

Participating in this study will provide you with an opportunity to engage in structured reflection on your experiences. This reflection has the potential to lead to an enhanced understanding of your practice as a preceptor or mentor.

This research will add to what is already known about the clinical teaching environment in paramedic practice and provide evidence to promote support for paramedic preceptors or mentors in their preparation for and performance of this role.

6. Are there any possible risks from participation in this study?

There are no specific risks anticipated with participation in this study.

7. What if I have questions about this research?

If you would like to discuss any aspect of this study please feel free to contact Dale Edwards on ph 03 6226 4703 or email dale.edwards@utas.edu.au. I would be happy to discuss any aspect of the research with you. Once I have analysed the information I will be mailing / emailing you a summary of the findings. You are welcome to contact me at that time to discuss any issue relating to the research study.

This study has been approved by the Tasmanian Social Science Human Research Ethics Committee. If you have concerns or complaints about the conduct of this study should contact the Executive Officer of the HREC (Tasmania) Network on (03) 6226 7479 or email human.ethics@utas.edu.au. The Executive Officer is the person nominated to receive complaints from research participants. You will need to quote [H13034].

Thank you for taking the time to consider this study.

If you wish to take part in it, please sign the attached consent form.

This information sheet is for you to keep.

Appendix 4 – Invitation to participate

Invitation to Participate in Research

Paramedic Preceptors - A Question of Role Preparedness.

You are invited to participate in a research study into the experiences of preceptors in the paramedic profession and their readiness to fulfil the role of preceptor. This research is being conducted as part of a Doctorate in Education through the University of Tasmania School of Education.

The purpose of the study is to explore:

1. The experiences of paramedics in performing the role of preceptor or mentor.
2. How paramedics view their readiness to perform the role of preceptor or mentor.

Who is eligible to participate?:

If you are a qualified paramedic or intensive care paramedic and work with students (including both on the job training programs and university student placement) then you are eligible to participate.

What does this study involve?:

If you consent to participate, you will participate in a face-to-face interview of approximately one hour in duration. The interview will explore:

- Your training and experience as a paramedic to provide context to the primary focus of the research
- Your experience of and experiences in performing the role of preceptor or mentor in paramedic practice
- Your qualifications in preceptorship
- Your understandings of your own readiness to perform in the preceptor or mentor role, both now and throughout your career.

What are the benefits to participating?:

This research will add to what is already known about the clinical teaching environment in paramedic practice and provide evidence to promote support for paramedic preceptors or mentors in their preparation for and performance of this role.

How to express interest in participating:

If you would like to be involved in this important research to provide greater understanding of the issues affecting paramedic preceptors or mentors, please email dale.edwards@utas.edu.au to express your interest. I will then contact you to make arrangements for a suitable interview time and venue.

Thank you for considering this research.
Sincerely

Dale Edwards
Candidate: Doctor of Education

Appendix 5 – Interview questions (initial)

Background questions regarding participant experience as a paramedic and preceptor

How long have you been working as a paramedic

Which model of training did you go through to become a paramedic? University or ambulance service based training? Where did you undergo your training?

Which services have you worked with in your career?

Is your experience predominately in urban areas or rural areas?

Have you worked with students during your time as a paramedic? For how long? How often?

Interview questions

1. What can you tell me about your experiences of performing the role of a preceptor

Focusing questions if required

- a. What can you tell me about your first experience (or the earliest experience you can recall) of working as a preceptor
 - b. Can you tell me if / how your experiences as a preceptor have changed over the time you have performed the role
2. Can you give examples of your best and worst experiences in the preceptor role?
 3. Can you describe how you have been prepared for, or prepared yourself for, the role of preceptor

Focusing questions if required

- a. What can you tell me about formal education or training you may have undertaken to fulfil the role
 - b. What can you tell me about any informal education or training you have experienced to fulfil the role
 - c. What can you tell me about your clinical preparedness for the role
4. What are your perceptions of the preceptor experience in the paramedic industry
 5. What suggestions do you have for refining the paramedic education process with regard to the preceptor role
 6. I am going to give you four terms, what can you tell me about your understanding of each term, or any differences between each term:

terms will be shown in writing to provide prompting

- a. Preceptor
- b. Mentor
- c. Clinical instructor
- d. Clinical supervisor

Appendix 6 – Interview questions (Changed)

Background questions regarding participant experience as a paramedic and preceptor

How long have you been working as a paramedic

Which model of training did you go through to become a paramedic? University or ambulance service based training? Where did you undergo your training?

Which services have you worked with in your career?

Is your experience predominately in urban areas or rural areas?

Have you worked with students during your time as a paramedic? For how long? How often?

Interview questions

1. What can you tell me about your experiences of performing the role of a preceptor

Focusing questions if required

- a. What can you tell me about your first experience (or the earliest experience you can recall) of working as a preceptor
- b. Can you tell me if / how your experiences as a preceptor have changed over the time you have performed the role
- c. Can you tell me how or if age and gender affects the preceptorship experience?
- d. Can you tell me how interpersonal relationships affect the preceptorship experience?

1. Explore student affect

2. Can you give examples of your best and worst experiences in the preceptor role?

3. Can you describe how you have been prepared for, or prepared yourself for, the role of preceptor

Focusing questions if required

- a. What can you tell me about formal education or training you may have undertaken to fulfil the role
- b. What can you tell me about any informal education or training you have experienced to fulfil the role
- c. What can you tell me about how clinical experience influences readiness to precept

4. What are your perceptions of the preceptor experience in the paramedic industry

5. What suggestions do you have for refining the paramedic education process with regard to the preceptor role

6. I am going to give you four terms, what can you tell me about your understanding of each term, or any differences between each term:

terms will be shown in writing to provide prompting

- a. Preceptor
- b. Mentor
- c. Clinical instructor
- d. Clinical supervisor